

RADIO TEST REPORT

(for Bluetooth classic)

Project No. : JB-Z0363
Client : Sony Corporation
Address : 1-7-1 Konan Minato-ku Tokyo, 108-0075 Japan
Type of Equipment : Helmet Mounted Wireless Headset
Model No. : NYSNO-10
FCC ID : AK8NYSNO10
Regulation Applied : 47 CFR Part 15 Subpart C
Final Judgment : **Passed**
Sample Receipt : October 05, 2017
Testing : October 24, 2017 - November 04, 2017
Reported : November 14, 2017

Reported by :

Approved Signatory :



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TESTING CERT #3203.01

TABLE OF CONTENTS

1. General Information	3
1.1. Description of Equipment Under Test (EUT).....	3
1.2. Summary of Test Result.....	3
1.3. Tested Methodology	4
1.4. Measurement Procedures	4
1.5. Test Facility.....	6
1.6. Uncertainty	6
2. System Test Configuration.....	7
2.1. Validation	7
2.2. Test Operating Conditions	7
2.3. EUT Modifications	7
2.4. Configuration of Tested System	8
3. Test Data.....	10
3.1. 20dB Bandwidth.....	10
3.2. Carrier Frequency Separation.....	12
3.3. Number of Hopping Frequencies	13
3.4. Time of Occupancy (Dwell Time).....	14
3.5. Maximum Peak Conducted Output Power.....	17
3.6. Radiated Spurious Emissions.....	18
3.7. Conducted Spurious Emissions for Band Edge.....	69
4. Method of Calculation.....	70
5. List of Test Equipment	72
5.1. Antenna-port Conducted Measurements.....	72
5.2. Radiated Spurious Emissions.....	72
6. Photographs of test setup	73
6.1. Antenna-port Conducted Measurements Photo(s)	73
6.2. Radiated Spurious Emissions Measurement Photo(s).....	74

Note

- ☒-indicates that the listed condition, standard or equipment is applicable for this report.
☐-indicates that the listed condition, standard or equipment is not applicable for this report.

1. General Information

1.1. Description of Equipment Under Test (EUT)

General specification

Test Sample Condition : ☐ Prototype ☒ Pre-production ☐ Mass-production
 Type of Equipment : Helmet Mounted Wireless Headset
 Trade Name : SONY
 Model No. : NYSNO-10
 Serial No. : 5001062, 5001063
 Power Rating : DC 3.6 V

Similar model (to be covered by this Report)

Model No. : None

Radio specification

Function of the Equipment : Transceiver
 Operating Frequency : 2402 - 2480 MHz
 Modulation Type : FHSS (GFSK, π /4DQPSK, 8DPSK)
 Channel Spacing : 1 MHz
 Channel Bandwidth : 1 MHz
 Number of channels : 79
 Antenna Type : Monopole Antenna
 Antenna connector Type : None
 Antenna Gain : 3.5 dBi
 Operating Temperature : -10 to +40 deg.C

1.2. Summary of Test Result

Test Item	Worst Margin	Test Frequency band	Results
AC Power-line Conducted Emissions	-	150 kHz - 30 MHz	N/A *2
20dB Bandwidth	Refer to the test data	Carrier	Complied
Carrier Frequency Separation	Refer to the test data	Carrier	Complied
Number of Hopping Frequencies	Refer to the test data	Carrier	Complied
Time of Occupancy (Dwell Time)	Refer to the test data	Carrier	Complied
Maximum Peak Conducted Output Power	12.80 dB	Carrier	Complied
Radiated Spurious Emissions	4.3 dB (AV) 7322.975 MHz Horizontal	9 kHz - 25 GHz (excluding carrier and band edge)	Complied
Conducted Spurious Emissions for Band Edge *1	22.10 dB 2400.00 MHz	Carrier band edge	Complied

*1: Conducted Spurious Emission was tested for the only frequencies in the non-restricted carrier band edges, since the spurious emissions in other non-restricted band were complied with Radiated Spurious Emission measurement.

*2: This item was not applied to the EUT since its transmission is stopped when the battery is being charged by the PC connected to AC Power-line.

Other requirements

Part 15.31(e) Supply voltage requirement
 : Complied (The EUT was tested with a new battery)
 Part 15.203 / 212 Antenna requirement
 : Complied (The EUT has an internal antenna which cannot be replaced by users)

1.3. Tested Methodology

Test Standard : 47 CFR Part15 Subpart C Section 15.207 / 15.247

Test Method : ANSI C63.10 - 2013
DA 00-705 (March 30, 2000)

Test Condition

Radiated Spurious Emissions

Test Distance : ☒ 3 m ☐ 10m (9 kHz - 30 MHz)
☒ 3 m ☐ 10m (30 - 1000 MHz)
☒ 3 m (1 - 25 GHz)

Dimensions of the EUT table : 0.8 m (below 1GHz) or 1.5 m (above 1GHz) height, 1.5 m width and 1m depth.

1.4. Measurement Procedures

We performed the measurements in accordance with NV3-12, available upon the request.

- ☒ No deviation
☐ Deviation from the above procedure

The summary of the above procedure is mentioned below

Antenna-port Conducted Measurements

1. Antenna-port of the EUT was connected to the power sensor (Maximum peak conducted output power) or spectrum analyzer. (other test items).
2. For each EUT operation mode, the Antenna-port Conducted Measurements were measured with spectrum analyzer.

Test Item	Detector	RBW
* Antenna-port Conducted Measurements		
20dB Bandwidth	Peak	30 kHz
Carrier Frequency Separation	Peak	100 kHz
Number of Hopping Frequencies	Peak	100 kHz
Time of Occupancy (Dwell Time)	Peak	1 MHz
Maximum Peak Conducted Output Power	Peak	N/A
Conducted Spurious Emissions for Band Edge	Peak	100 kHz

Radiated Spurious Emissions

- The non-conductive table (EUT table) made of (☐ FRP, ☒ Styrene Foam, ☐ other non-conductive material) was placed in the center of the turntable.
- The EUT was placed on the center of the tabletop.
- The test antenna was placed away from the EUT at test distance.
- The limits were compensated the distance factor with follows;
 $9\text{ kHz} - 490\text{ kHz} [\text{Limit at } 3\text{m}] = [\text{Limit at } 300\text{m}] + 40\log(300[\text{m}] / 3[\text{m}])$
 $490\text{ kHz} - 30\text{ MHz} [\text{Limit at } 3\text{m}] = [\text{Limit at } 30\text{m}] + 40\log(30[\text{m}] / 3[\text{m}])$
- Find the worst arrangement of the EUT according to follows;
 - Rotating the turntable and/or scanning the antenna.
 - On every condition, exploring the highest emissions with the spectrum analyzer.
(9 kHz - 25 GHz, peak detector)
- On the worst arrangement of the EUT found in above, choose the three highest harmonics or spurious emissions on the spectrum data.(*excluding carrier band edges)
 The final measurements of all test operating modes carried out on these emissions as follows;

The test antenna and the turntable were performed with follows;

	9 kHz - 30 MHz	30 MHz - 1000 MHz	1 GHz - 25 GHz
Antenna	Loop Antenna	Bi-conical Antenna, Log-periodic Antenna	Horn Antenna
Antenna scanning range	1 m, Vertical, 360 degrees	1 - 4 m, Horizontal and Vertical	1 - 4 m *, Horizontal and Vertical
Turntable rotating range	360 degrees	360 degrees	360 degrees

*: Final measurements are performed keeping the antenna in the "cone of radiation" from EUT area and pointed at the area both in azimuth and elevation, with polarization oriented for maximum response.

Instruments settings were carried out with follows;

	9 kHz - 90 kHz 110 kHz - 490 kHz	90 kHz - 110 kHz 490 kHz - 30 MHz	30 MHz - 1000 MHz	1 GHz - 25 GHz
Detector	Peak / Average	Quasi-peak	Quasi-peak	Peak / Average
RBW	9 kHz (6 dB) *1	9 kHz (6 dB) *1	120 kHz (6 dB)	1 MHz (6 dB)
VBW	N/A	N/A	N/A	3 MHz (for peak) 10 Hz (for average)
Instrument	EMI test receiver	EMI test receiver	EMI test receiver	Spectrum analyzer

*1: When the measurement frequencies below 150 kHz, RBW: 200 Hz was used.

- If the final measurement result exceeded the limit(FCC 15.209(a)) in non-restricted band(excluding carrier band edges), the measurement is carried out additionally and compared with the limit (-20 dBc) with follows;

Measurement points

- Fundamental Frequency

- Frequency that exceeded the limit in non-restricted band (excluding carrier band edges)

	9 kHz - 150 kHz	150 kHz - 30 MHz	30 MHz - 25 GHz
Detector	Peak	Peak	Peak
RBW	300 Hz (6dB) *	10 kHz (6dB) *	100 kHz (6dB)
Instrument	Spectrum analyzer	Spectrum analyzer	Spectrum analyzer

*: Correction factor of RBW was compensated to a measurement result by the following formula.

$$\text{C.F. of RBW [dB]} = 10 * \log(100\text{ kHz} / \text{used RBW})$$

- Although these tests were performed other than open field area test site, adequate comparison measurements were confirmed against 30 m open field area test site. Therefore sufficient tests were made to demonstrate that the alternative site produces results that correlate with the ones of tests made in an open field based on KDB 414788 D01.

1.5. Test Facility

Address of Test Facility

Test Facility Name : Sony Global Manufacturing & Operations Corporation
EMC/RF Test Laboratory, Main Lab.
Address : Kisarazu Site 8-4 Shiomi Kisarazu-shi, Chiba, 292-0834 Japan
Phone : +81 438 37 2750

Radiated Spurious Emission

Semi-Anechoic chamber

☒ 4th Site ☐ EMC Site

Antenna-port Conducted Measurements *

Shielded Room

☒ 4th Site SR1

*Note: This item contains the following

- 20dB Bandwidth
- Carrier Frequency Separation
- Number of Hopping Frequencies
- Time of Occupancy (Dwell Time)
- Maximum Peak Conducted Output Power
- Conducted Spurious Emissions for Band Edge

A2LA Accreditation for Test Facility

The above test facility has been fully reported to A2LA and accepted as follows:

A2LA Certificate No. : 3203.01
Cert. Validated Date : 31 Oct 2019

1.6. Uncertainty

Test Item	Frequency	4th Site SR1
Conducted Output Power	1 - 6 GHz	± 0.84 dB
Conducted Spurious Emissions	below 6 GHz	± 0.89 dB

Test Item	Frequency	Distance	4th Site	EMC Site
AC Power-line Conducted Emissions	150 kHz - 30 MHz	-	± 3.34 dB	± 3.34 dB
Radiated Emissions	below 30 MHz	3m	± 2.59 dB	± 2.59 dB
	30 - 300 MHz	3m	± 4.18 dB	± 4.18 dB
	300 - 1000 MHz	3m	± 4.04 dB	± 4.04 dB
	1 - 6 GHz	3m	± 4.63 dB	± 4.63 dB
	6 - 18 GHz	3m	± 5.31 dB	± 5.31 dB
	18 - 26.5 GHz	3m	± 5.78 dB	± 5.78 dB

2. System Test Configuration

2.1. Validation

The system was configured for testing in a typical (as a customer would normally use it).
The tests were conducted with the worst case modes as follows.

2.2. Test Operating Conditions

The tests have been carried out the following conditions.

Test Items	Operating Mode *1	Packet type *2,3	Test Channels
Carrier Frequency Separation, Number of Hopping Frequencies, Time of Occupancy (Dwell Time)	BDR	DH5	Hopping ON
	EDR	3DH3	
20dB Bandwidth, Maximum Peak Conducted Output Power, Radiated Spurious Emissions	BDR	DH5	2402 MHz, 2441 MHz, 2480 MHz
	EDR	3DH3	
Conducted Spurious Emissions for Band Edge	BDR	DH5	2402 MHz
	EDR	3DH3	

Note:

*1: Inquiry mode was not performed based on the result of pre-compliance testing.

*2: The worst packet type has been decided based on the result of maximum duty cycle and pre-compliance testing in the actual product specification.

*3: Packet type for EDR has been decided based on the result of Maximum Peak Conducted Output Power.

The Software for Operating Mode

Name : BlueSuite

Version : 2.5.0

Special accessories needed for connecting the EUT to achieve compliance:

Item	Manufacturer	Model No.	Serial No.	Remark
Personal Computer	SONY	PCG-71611N	1006554	-
AC ADAPTER	SONY	VPC-CB19FJ	148753032 0255555	-

2.3. EUT Modifications

☒ No equipment modification to achieve compliance to the standard levels was done during the tests.

☐ Equipment was modified to achieve compliance to the standard level as below.

Responsible Party Signature

Typed/ Print Name :

Responsible Party :

Position :

Date :

2.4. Configuration of Tested System

Antenna-port Conducted Measurements

The equipment under test (EUT)

Symbol	Item	Manufacturer	Model No.	Serial No.
A-1	Helmet Mounted Wireless Headset	SONY	NYSNO-10	5001063

Support equipment for operation

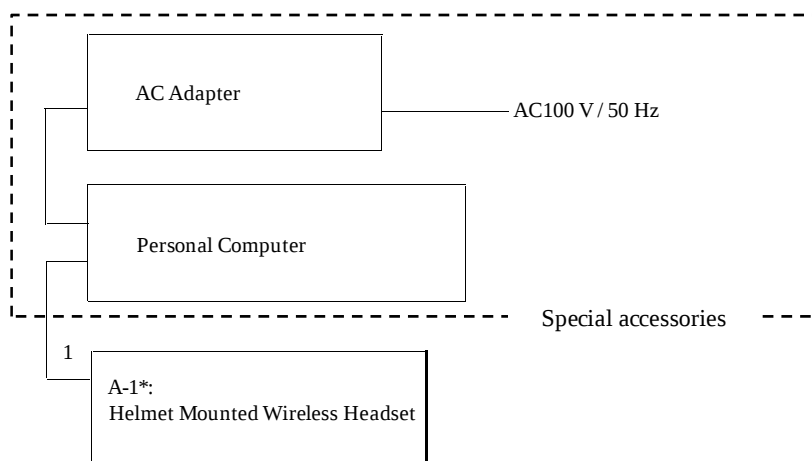
Symbol	Item	Manufacturer	Model No.	Serial No.
-	-	-	-	-

Type of cable

Symbol	Description	Identification (Manufacturer etc.)	Shielded YES / NO	Ferrite Core	Length (m)	Bundled
1	USB Cable	-	YES	NO	0.5	-

System configuration

*: EUT



Radiated Spurious Emissions Measurement

The equipment under test (EUT)

Symbol	Item	Manufacturer	Model No.	Serial No.
A-2	Helmet Mounted Wireless Headset	SONY	NYSNO-10	5001062

Support equipment for operation

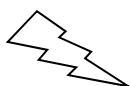
Symbol	Item	Manufacturer	Model No.	Serial No.
-	-	-	-	-

Type of cable

Symbol	Description	Identification (Manufacturer etc.)	Shielded YES / NO	Ferrite Core	Length (m)	Bundled
-	-	-	-	-	-	-

System configuration

*: EUT

Bluetooth
Transmitting

A-2*:
Helmet Mounted
Wireless Headset

3. Test Data

3.1. 20dB Bandwidth

- 1) Ambient temperature : 22.0 deg.C
- 2) Relative humidity : 51.0 %
- 3) Date of measurement : October 24, 2017
- 4) Measured by : M. KOUGA
- 5) Operating mode : Transmitting mode

Mode		Channel [MHz]	Result [MHz]	Limit [MHz]
BDR	DH5	2402	0.943	-
		2441	0.940	-
		2480	0.937	-
EDR	3DH3	2402	1.255	-
		2441	1.253	-
		2480	1.253	-

[BDR / 2402MHz]



[BDR / 2441MHz]



[BDR / 2480MHz]



[EDR / 2402MHz]



[EDR / 2441MHz]



[EDR / 2480MHz]



3.2. Carrier Frequency Separation

- 1) Ambient temperature : 22.2 deg.C
- 2) Relative humidity : 51.0 %
- 3) Date of measurement : October 24, 2017
- 4) Measured by : M. KOUGA
- 5) Operating mode : Transmitting mode

Mode		Reading [kHz]	Limit [kHz]
BDR	DH5	1013.4	628.6
EDR	3DH3	998.4	836.6

[BDR]



[EDR]



3.3. Number of Hopping Frequencies

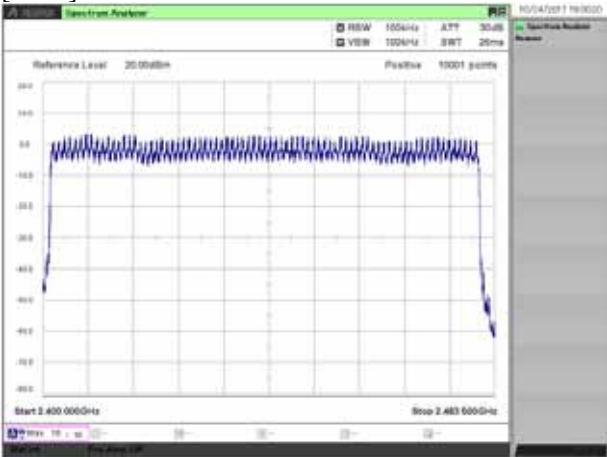
- 1) Ambient temperature : 22.2 deg.C
- 2) Relative humidity : 51.0 %
- 3) Date of measurement : October 24, 2017
- 4) Measured by : M. KOUGA
- 5) Operating mode : Transmitting mode

Mode		Number [channel]	Limit [channel]
BDR	DH5	79	15
EDR	3DH3	79	15

[BDR]



[EDR]

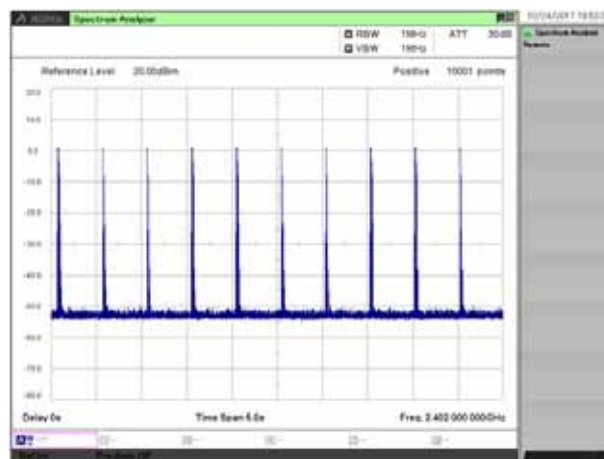


3.4. Time of Occupancy (Dwell Time)

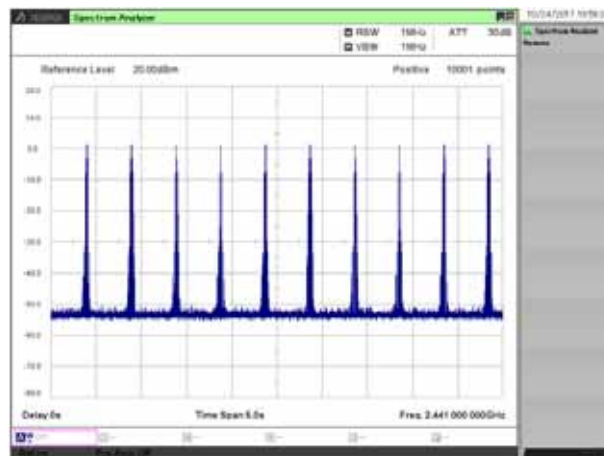
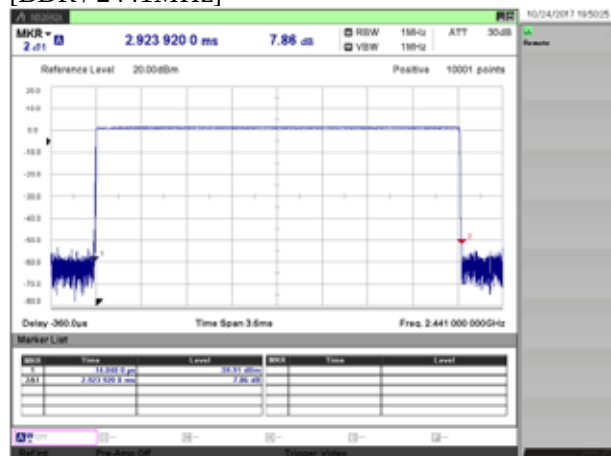
- 1) Ambient temperature : 22.2 deg.C
- 2) Relative humidity : 51.0 %
- 3) Date of measurement : October 24, 2017
- 4) Measured by : M. KOUGA
- 5) Operating mode : Transmitting mode

Mode		Channel [MHz]	Dwell Time [msec]	Cycle [time]	Result [msec]	Limit [msec]
BDR	DH5	2402	2.92	10.0	184.7	400.0
		2441	2.92	10.0	184.8	400.0
		2480	2.92	10.0	184.8	400.0
EDR	3DH3	2402	1.68	13.0	138.4	400.0
		2441	1.69	13.0	138.5	400.0
		2480	1.68	13.0	138.4	400.0

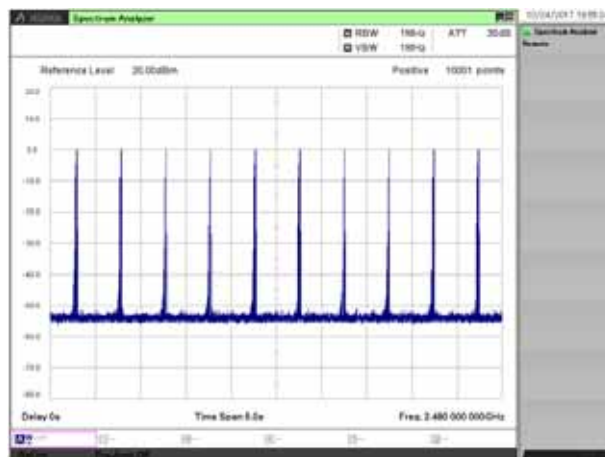
[BDR / 2402MHz]



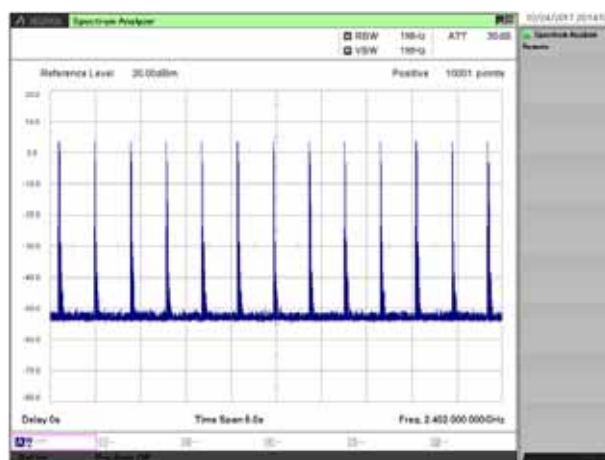
[BDR / 2441MHz]



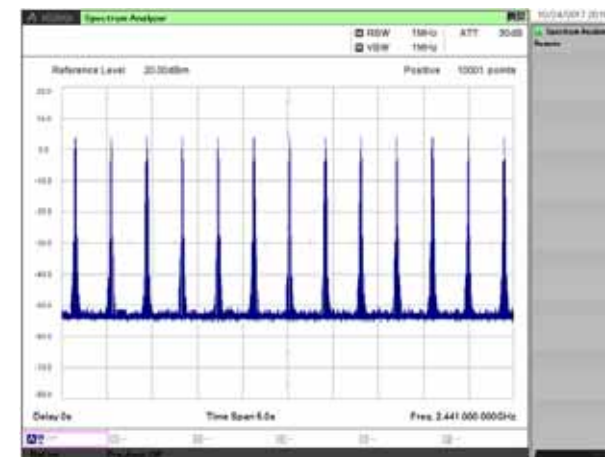
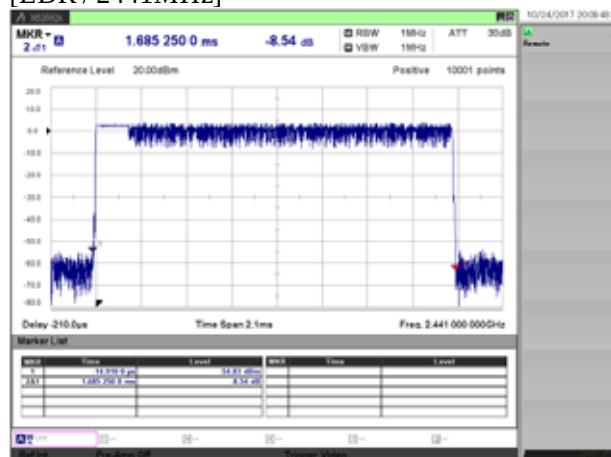
[BDR / 2480MHz]



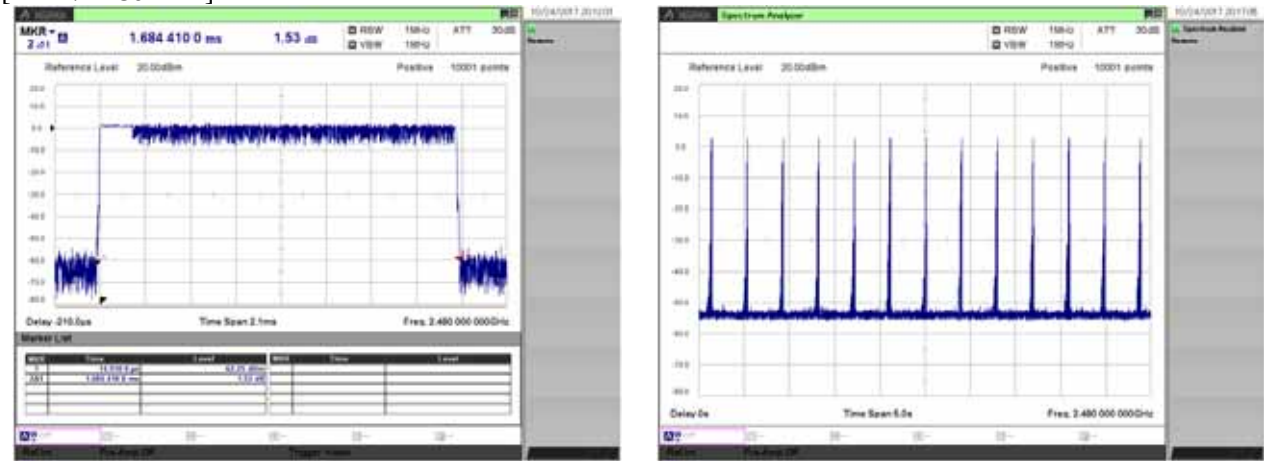
[EDR / 2402MHz]



[EDR / 2441MHz]



[EDR / 2480MHz]



3.5. Maximum Peak Conducted Output Power

- 1) Ambient temperature : 22.2 deg.C
- 2) Relative humidity : 51.0 %
- 3) Date of measurement : October 24, 2017
- 4) Measured by : M. KOUGA
- 5) Operating mode : Transmitting mode

Peak Conducted Output Power

Mode		Channel [MHz]	Reading(PK) [dBm]	C.F. [dB]	Result(PK) [dBm]	Result(PK) [W]	Limit [dBm]	Limit [W]	Margin [dB]
BDR	DH5	2402	2.27	11.64	13.91	0.02460	30.0	1.0	16.09
		2441	2.57	11.64	14.21	0.02636	30.0	1.0	15.79
		2480	1.36	11.64	13.00	0.01995	30.0	1.0	17.00
EDR	2DH3	2402	4.83	11.64	16.47	0.04436	30.0	1.0	13.53
		2441	5.14	11.64	16.78	0.04764	30.0	1.0	13.22
		2480	3.98	11.64	15.62	0.03648	30.0	1.0	14.38
	3DH3	2402	5.21	11.64	16.85	0.04842	30.0	1.0	13.15
		2441	5.56	11.64	17.20	0.05248	30.0	1.0	12.80
		2480	4.39	11.64	16.03	0.04009	30.0	1.0	13.97

Average Conducted Output Power (for SAR measurement)

Mode		Channel [MHz]	Reading(AV) [dBm]	C.F. [dB]	Duty Factor [dB]	Result(AV) [dBm]	Result(AV) [W]
BDR	DH5	2402	-1.56	11.64	3.28	13.36	0.02168
		2441	-1.18	11.64	3.28	13.74	0.02366
		2480	-2.43	11.64	3.28	12.49	0.01774
EDR	2DH3	2402	-2.89	11.64	4.71	13.46	0.02218
		2441	-2.47	11.64	4.71	13.88	0.02443
		2480	-3.60	11.64	4.71	12.75	0.01884
	3DH3	2402	-2.90	11.64	4.71	13.45	0.02213
		2441	-2.46	11.64	4.71	13.89	0.02449
		2480	-3.65	11.64	4.71	12.70	0.01862

Duty Cycle check

Mode		Channel [MHz]	T(on+off) [msec]	T(on) [msec]	Duty Cycle [%]
BDR	DH1	2441	1.250	0.411	32.88
	DH3	2441	3.750	1.690	45.07
	DH5	2441	6.250	2.940	47.04
EDR	2DH1	2441	1.250	0.422	33.76
	2DH3	2441	5.000	1.690	33.80
	2DH5	2441	12.500	2.950	23.60
	3DH1	2441	1.250	0.422	33.76
	3DH3	2441	5.000	1.690	33.80
	3DH5	2441	12.500	2.950	23.60

3.6. Radiated Spurious Emissions

1) Date of measurement

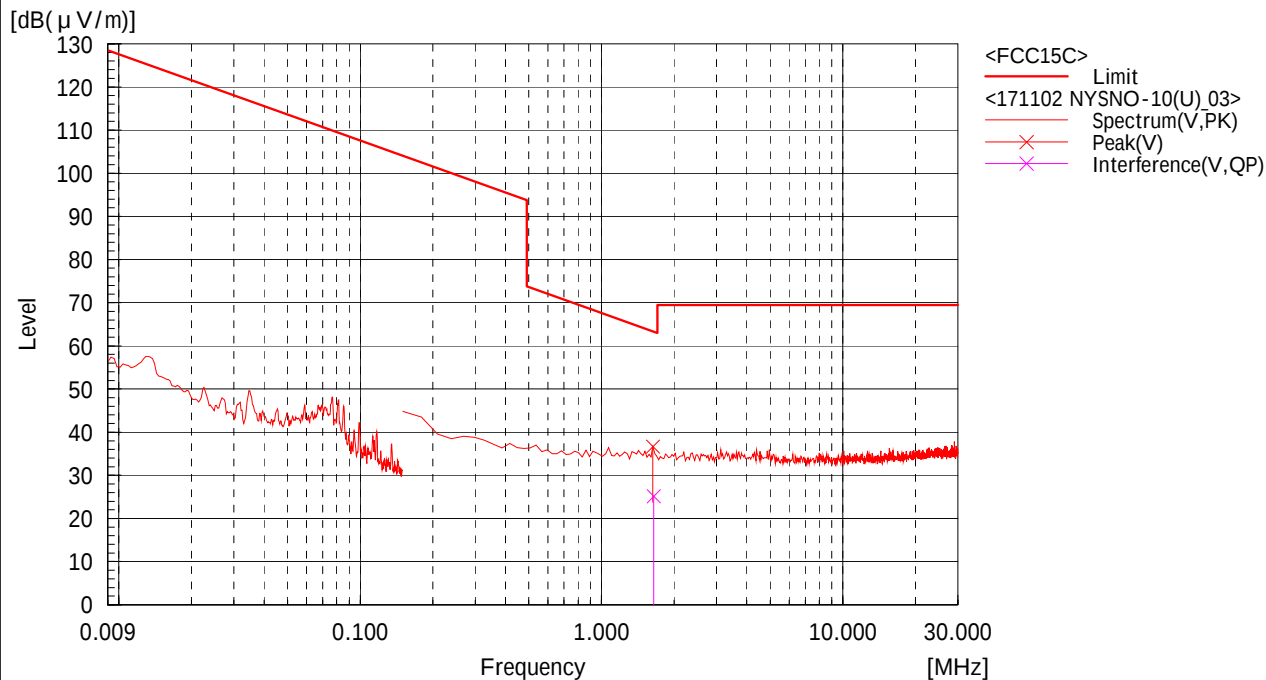
9 kHz - 30 MHz	: November 02, 2017 (all mode)
30 MHz - 1000 MHz	: November 04, 2017 (all mode)
1 GHz - 6 GHz	: October 26, 2017 (all mode)
6 GHz - 18 GHz	: November 01, 2017(all mode)
18 GHz - 24.835 GHz	: November 03, 2017(all mode)

9 kHz - 30 MHz

[BDR(DH5)/2402MHz]

Sony Global M&O Corp
Kisarazu DTS

<<Radiated Emission>>

Model : NYSNO-10
Serial : 5001062
Operator : T.NAKAMURA
Power : DC 3.6 V
Temp./Hum. : 20deg / 57%Limit : FCC Part15C_15.209 (3m)
Remark1 : 0 °
Remark2 : Z
Remark3 : Low
Remark4 : DH5

Final Result

--- Vertical Polarization (QP)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	1.645	5.2	20.0	25.2	63.3	38.1	100.0	36.8

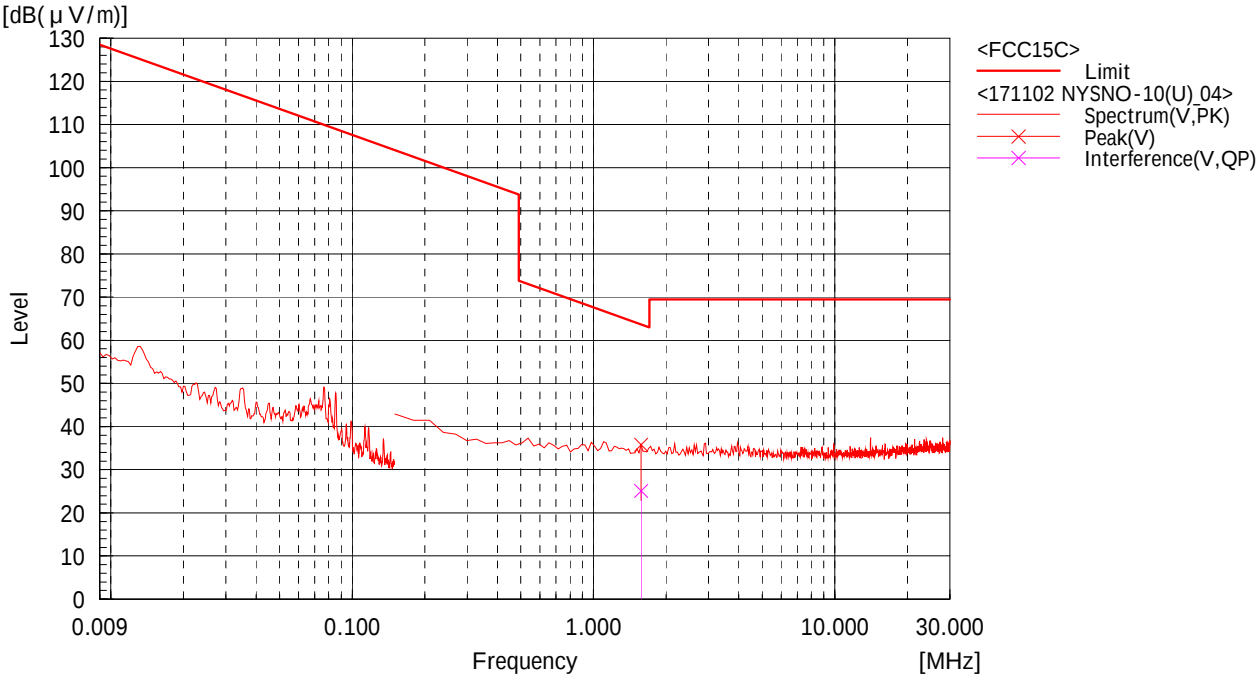
[BDR(DH5)/2441MHz]

Sony Global M&O Corp
Kisarazu DTS

<<Radiated Emission>>

Model : NYSNO-10
Serial : 5001062
Operator : T.NAKAMURA
Power : DC 3.6 V
Temp./Hum. : 20deg / 57%

Limit : FCC Part15C_15.209 (3m)
Remark1 : 0 °
Remark2 : Z
Remark3 : Mid
Remark4 : DH5



Final Result

--- Vertical Polarization (QP)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	1.574	5.1	20.0	25.1	63.7	38.6	100.0	54.1

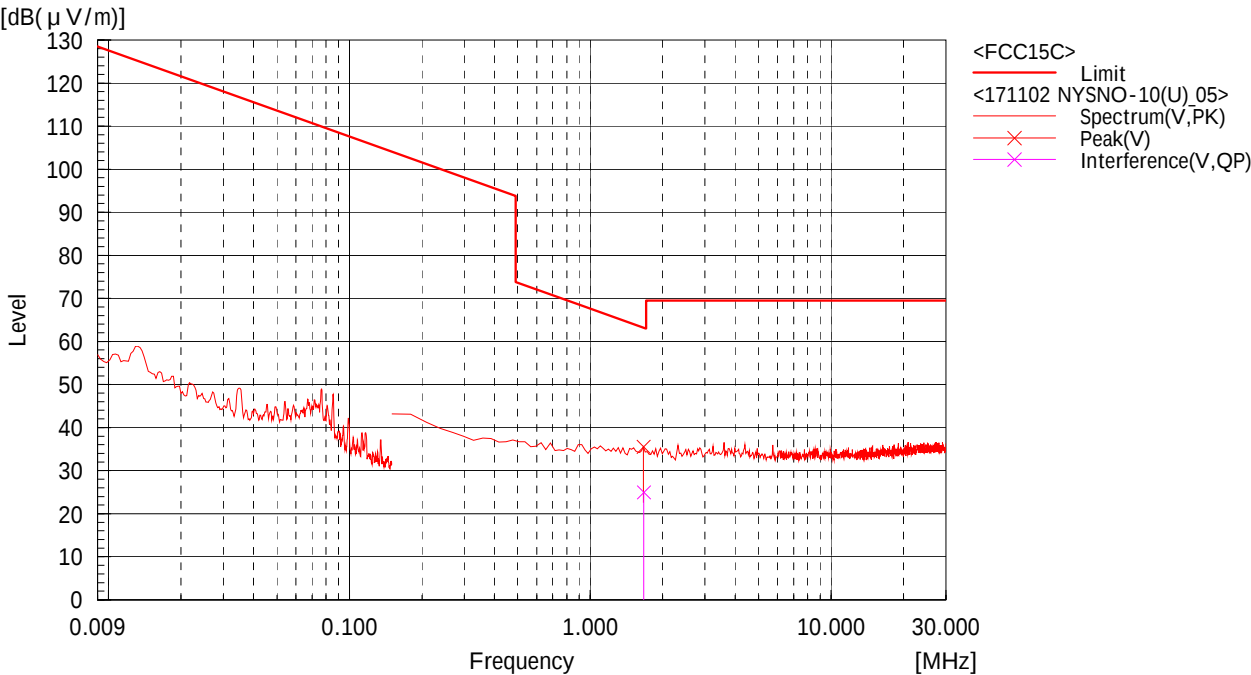
[BDR(DH5)/2480MHz]

Sony Global M&O Corp
Kisarazu DTS

<<Radiated Emission>>

Model : NYSNO-10
Serial : 5001062
Operator : T.NAKAMURA
Power : DC 3.6 V
Temp./Hum. : 20deg / 57%

Limit : FCC Part15C_15.209 (3m)
Remark1 : 0 °
Remark2 : Z
Remark3 : High
Remark4 : DH5

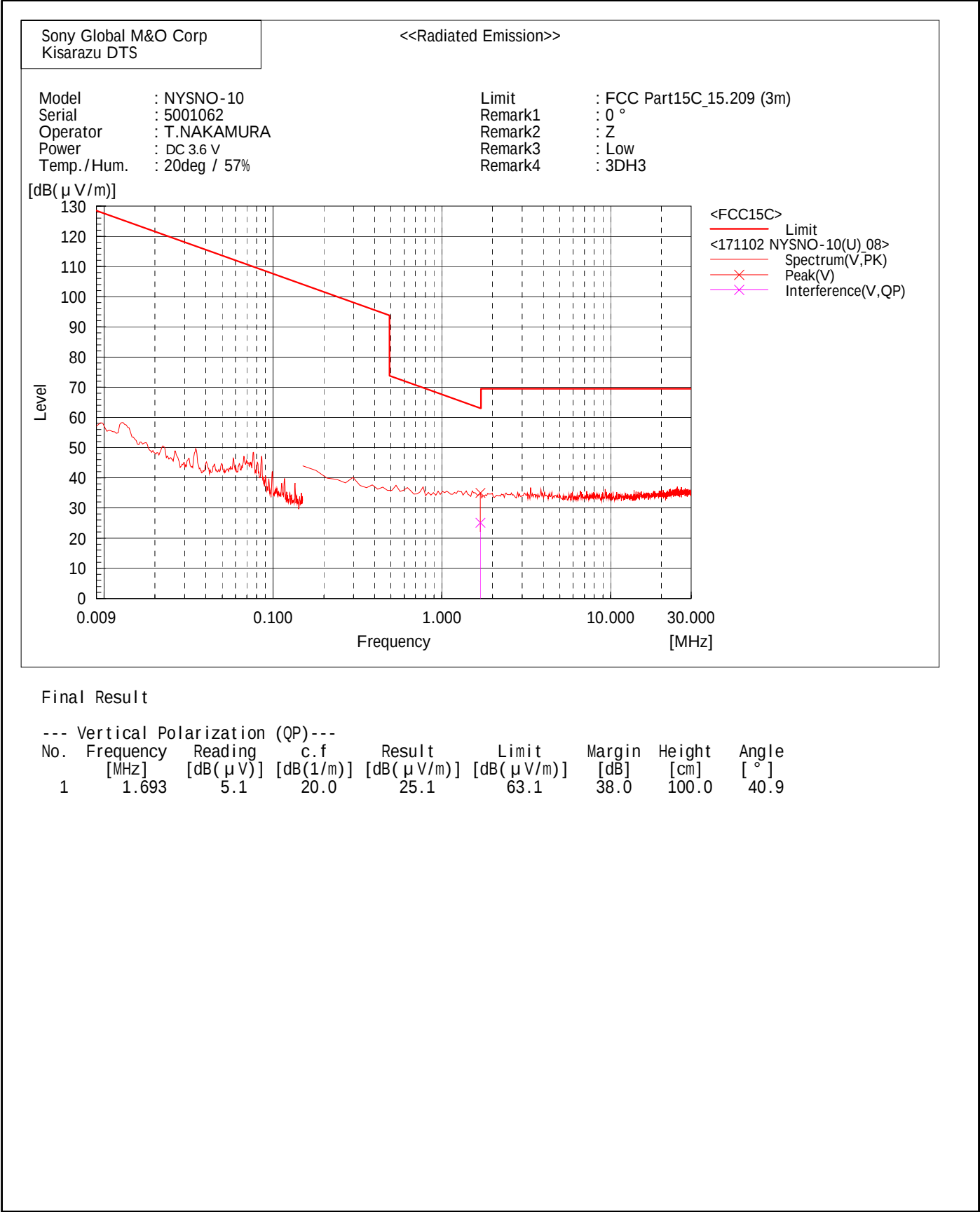


Final Result

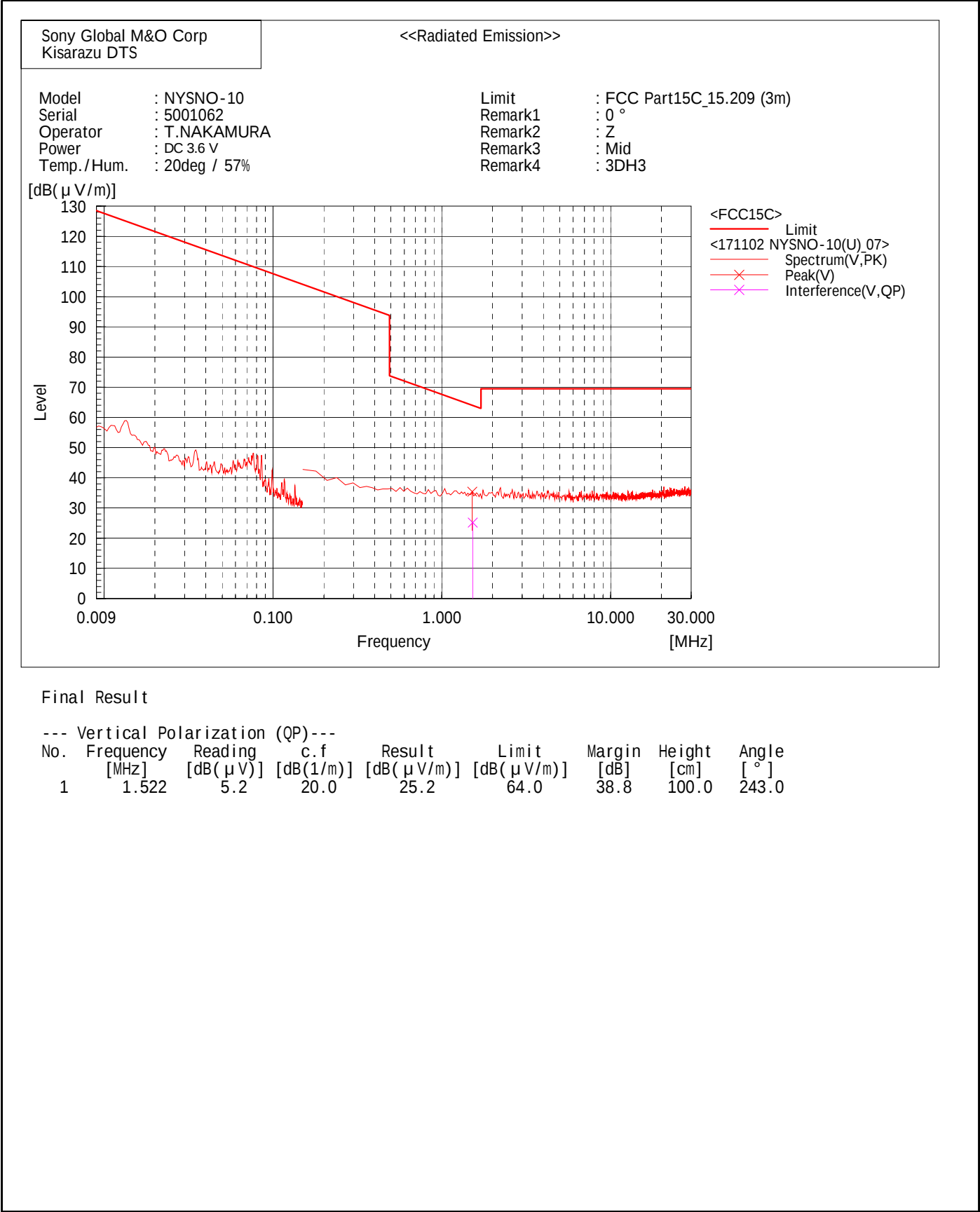
--- Vertical Polarization (QP)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	1.668	5.0	20.0	25.0	63.2	38.2	100.0	166.3

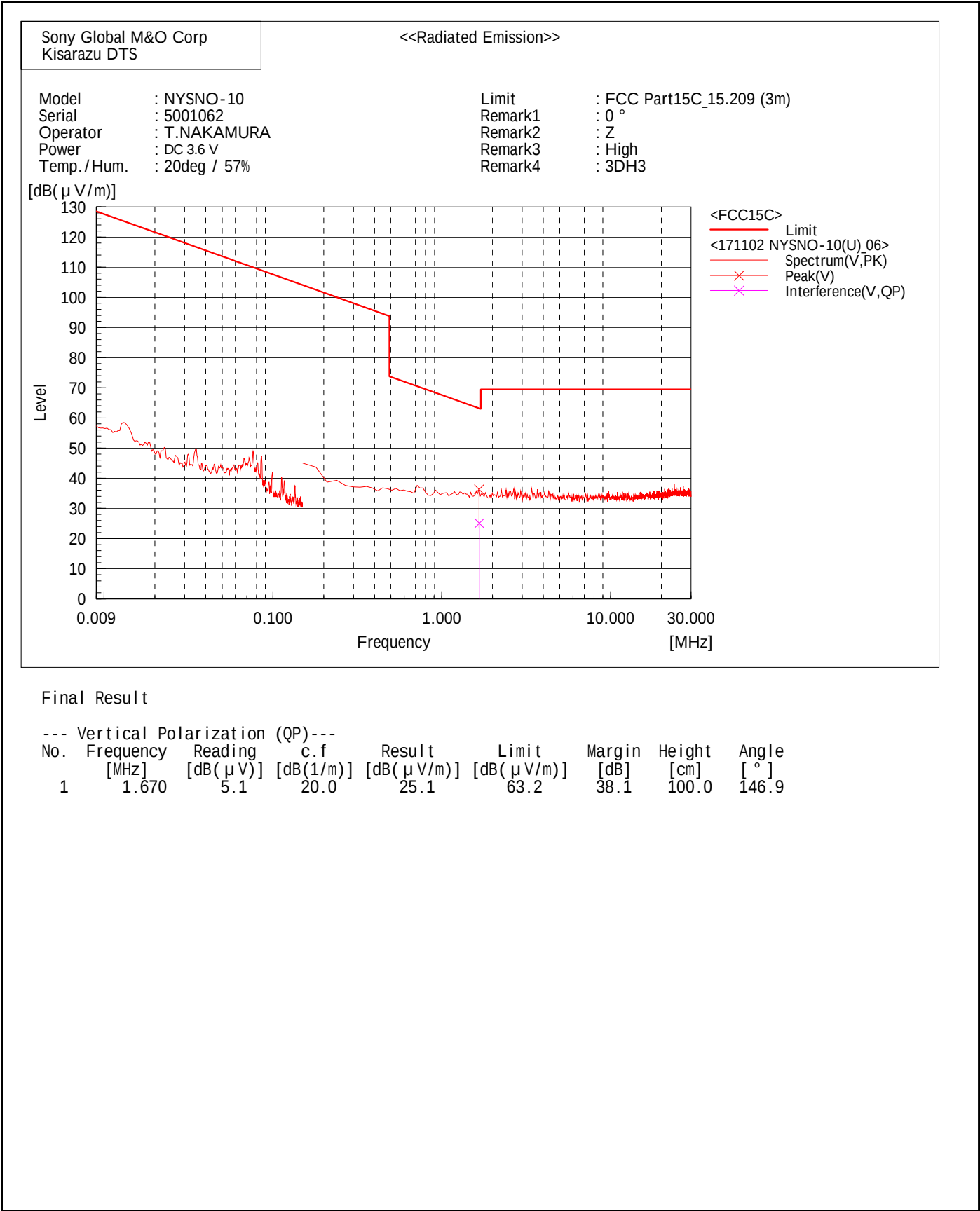
[EDR(3DH3)/2402MHz]



[EDR(3DH3)/2441MHz]



[EDR(3DH3)/2480MHz]



30 MHz - 1000 MHz

[BDR(DH5)/2402MHz]

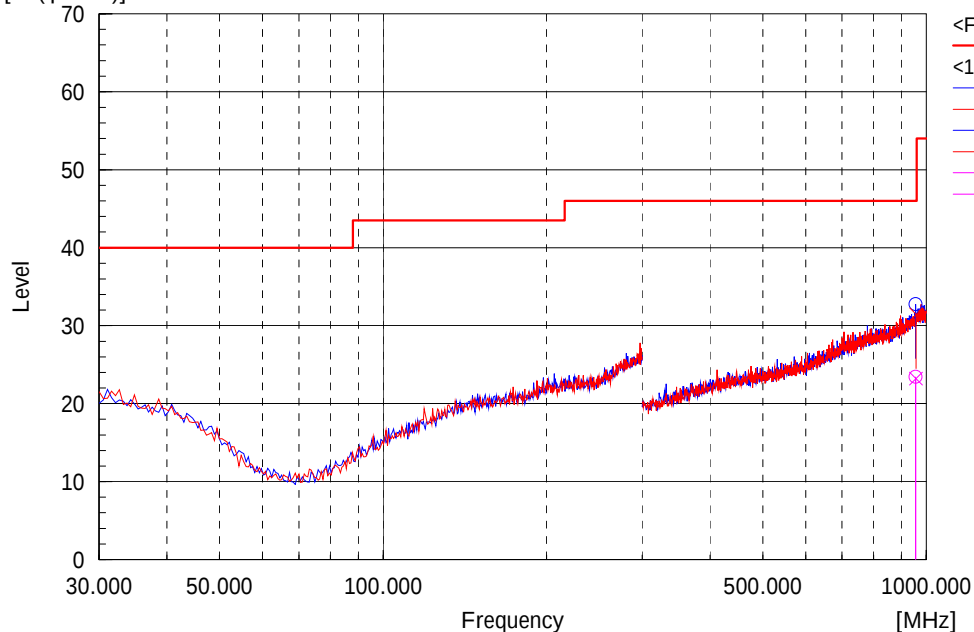
Sony Global M&O Corp
Kisarazu DTS

<<Radiated Emission>>

Model : NYSNO-10
 Serial : 5001062
 Operator : T.NAKAMURA
 Power : DC 3.6 V
 Temp./Hum. : 21deg / 62%

Limit : FCC Part15C 15.209(a) 3m
 Remark1 :
 Remark2 : Z
 Remark3 : Low
 Remark4 : DH5

[dB(μV/m)]

**Final Result**

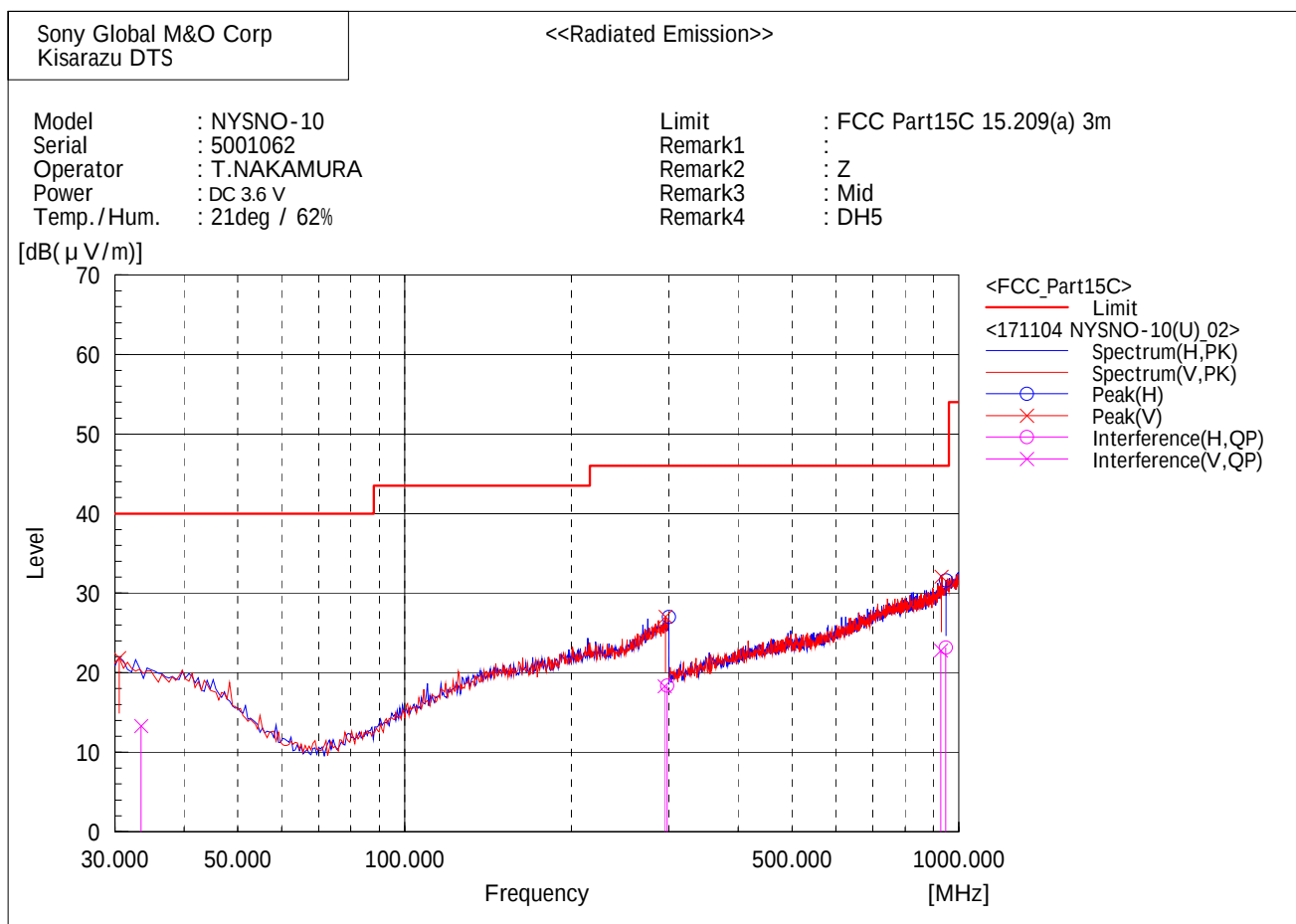
--- Horizontal Polarization (QP)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	955.360	24.3	-0.9	23.4	46.0	22.6	258.1	63.8

--- Vertical Polarization (QP)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	957.160	24.1	-0.9	23.2	46.0	22.8	165.2	115.6

[BDR(DH5)/2441MHz]



Final Result

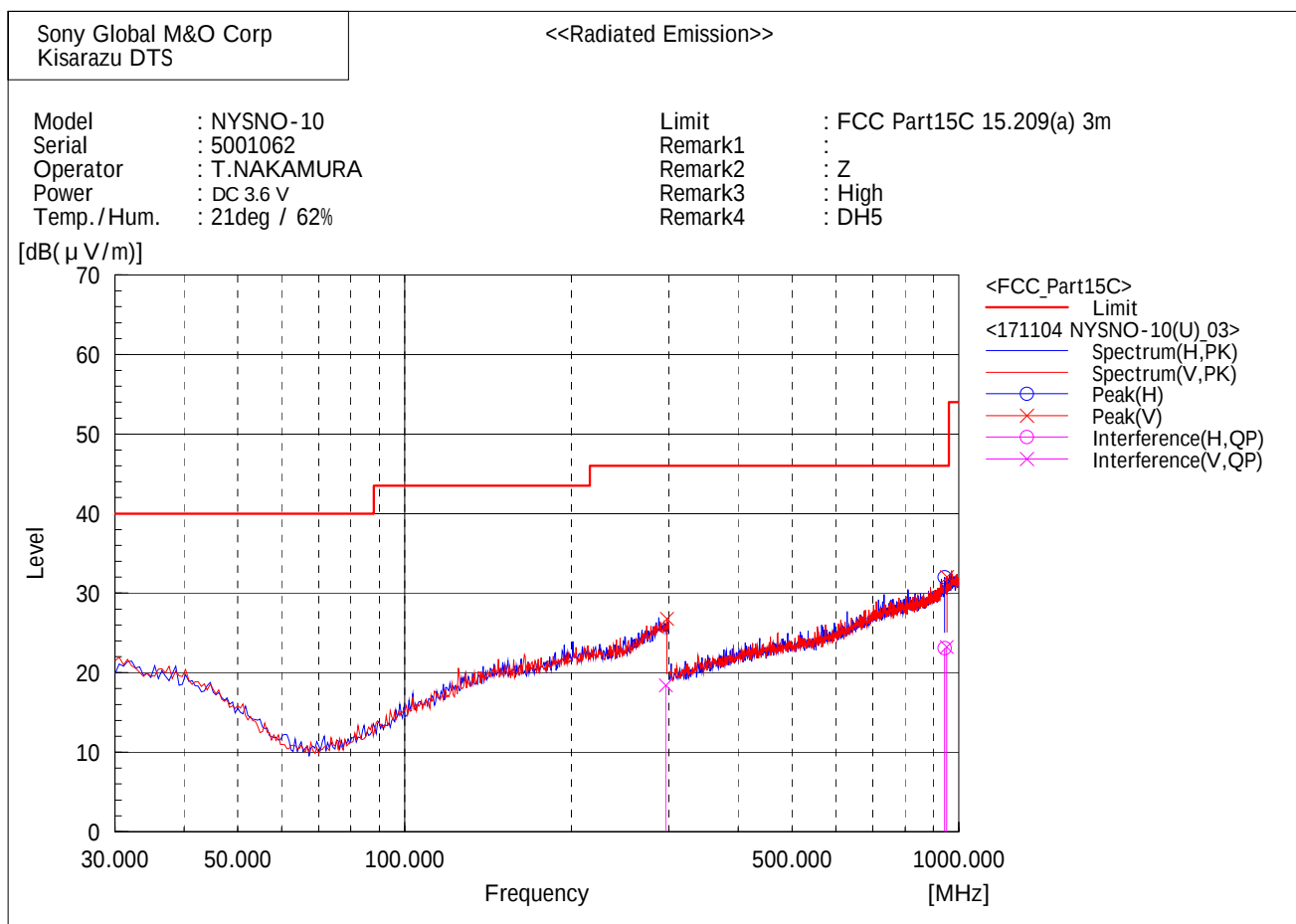
--- Horizontal Polarization (QP)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	297.690	24.3	-5.9	18.4	46.0	27.6	225.8	187.8
2	947.580	24.3	-1.1	23.2	46.0	22.8	170.1	336.9

--- Vertical Polarization (QP)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	33.462	25.3	-12.0	13.3	40.0	26.7	102.0	306.6
2	294.397	24.3	-6.0	18.3	46.0	27.7	200.4	306.6
3	928.720	24.4	-1.6	22.8	46.0	23.2	158.0	191.9

[BDR(DH5)/2480MHz]



Final Result

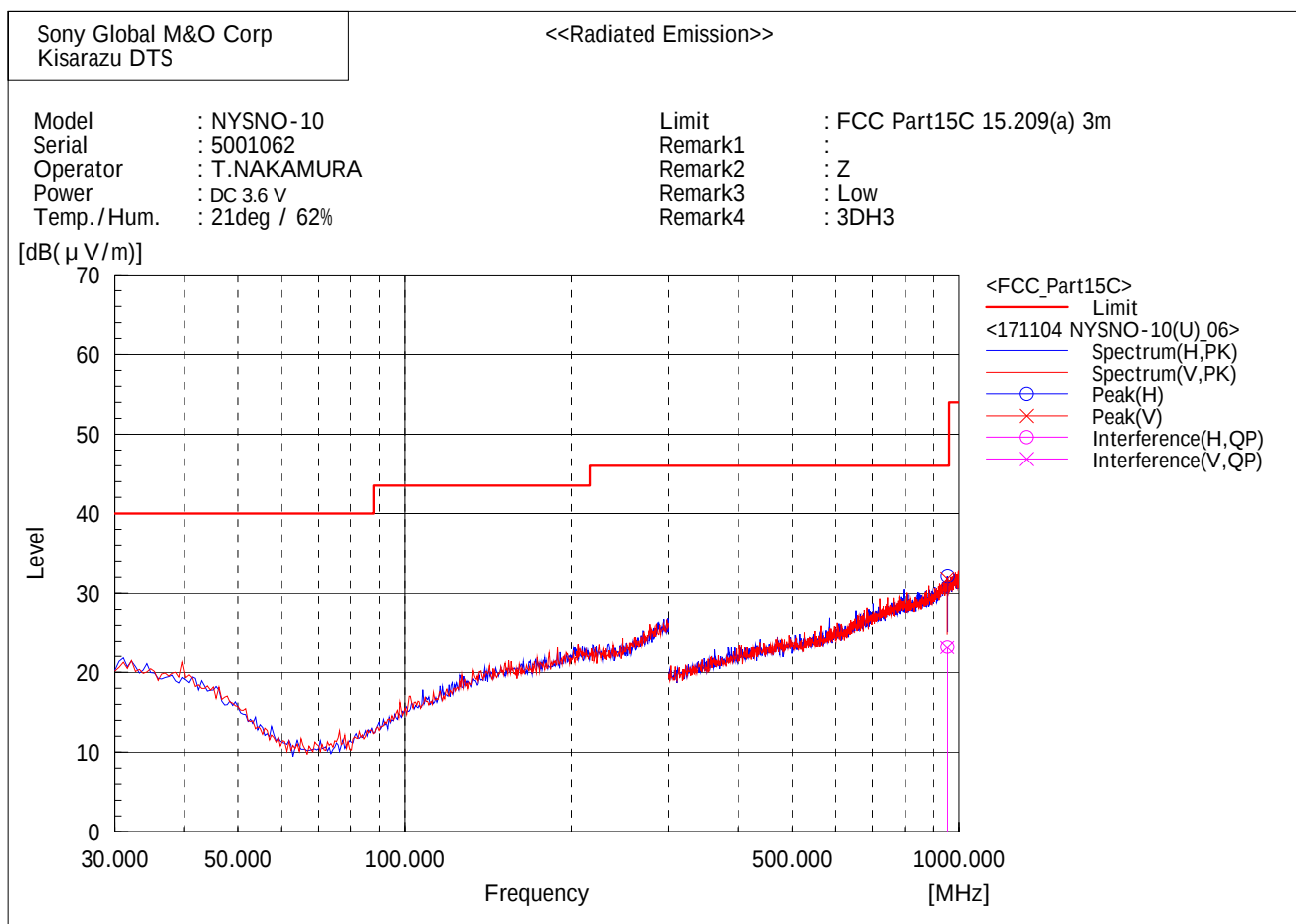
--- Horizontal Polarization (QP)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	943.000	24.3	-1.2	23.1	46.0	22.9	235.0	44.6

--- Vertical Polarization (QP)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	296.071	24.3	-5.9	18.4	46.0	27.6	175.0	220.9
2	950.680	24.2	-1.0	23.2	46.0	22.8	138.4	240.7

[EDR(3DH3)/2402MHz]



Final Result

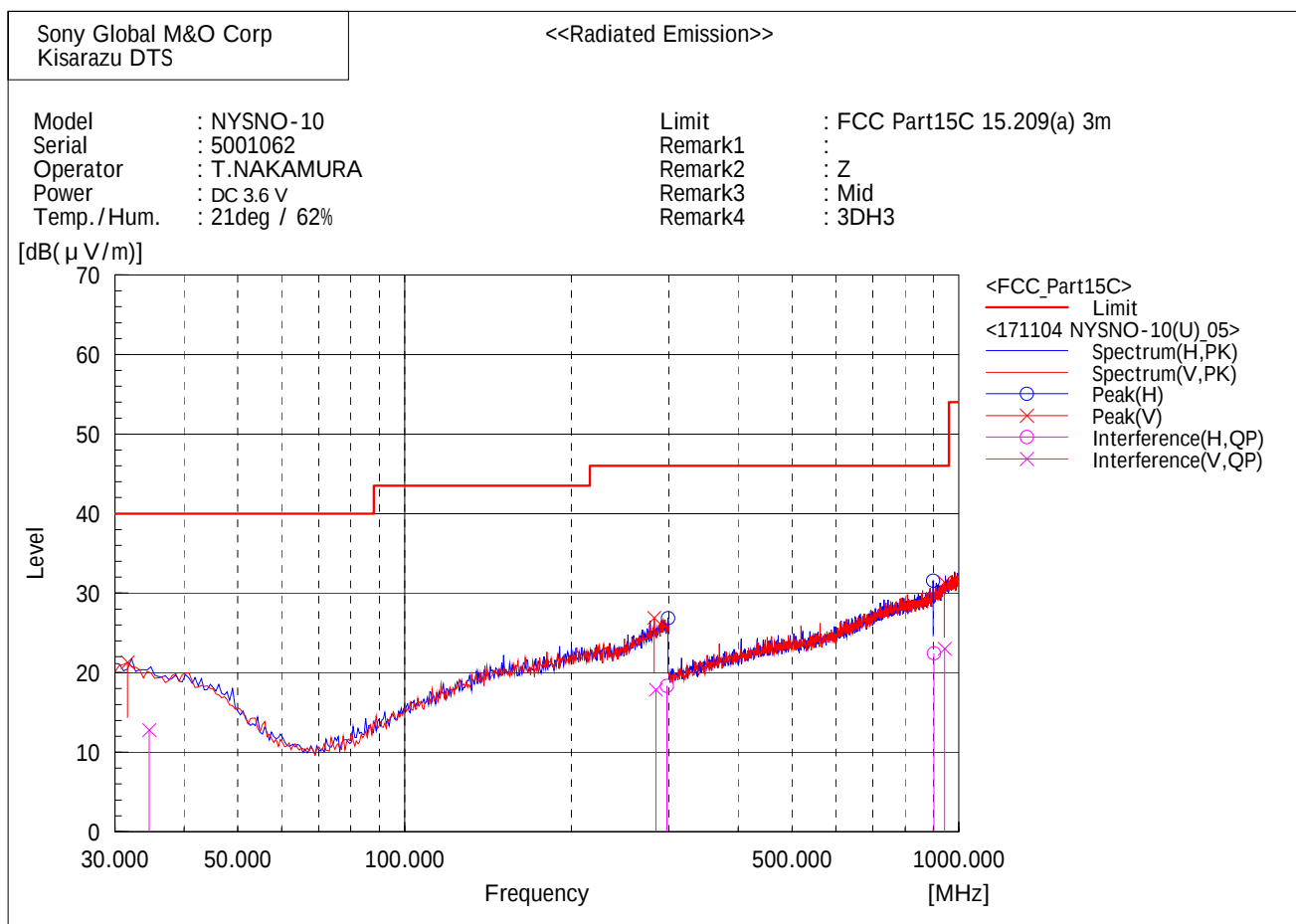
--- Horizontal Polarization (QP)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	953.660	24.3	-1.0	23.3	46.0	22.7	276.9	89.2

--- Vertical Polarization (QP)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	951.800	24.2	-1.0	23.2	46.0	22.8	131.7	23.8

[EDR(3DH3)/2441MHz]



Final Result

--- Horizontal Polarization (QP)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	297.331	24.3	-5.9	18.4	46.0	27.6	269.1	316.4
2	901.600	24.8	-2.4	22.4	46.0	23.6	273.9	287.9

--- Vertical Polarization (QP)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	34.599	25.2	-12.4	12.8	40.0	27.2	162.6	278.4
2	284.100	24.3	-6.4	17.9	46.0	28.1	211.5	233.8
3	942.440	24.3	-1.3	23.0	46.0	23.0	147.6	76.0

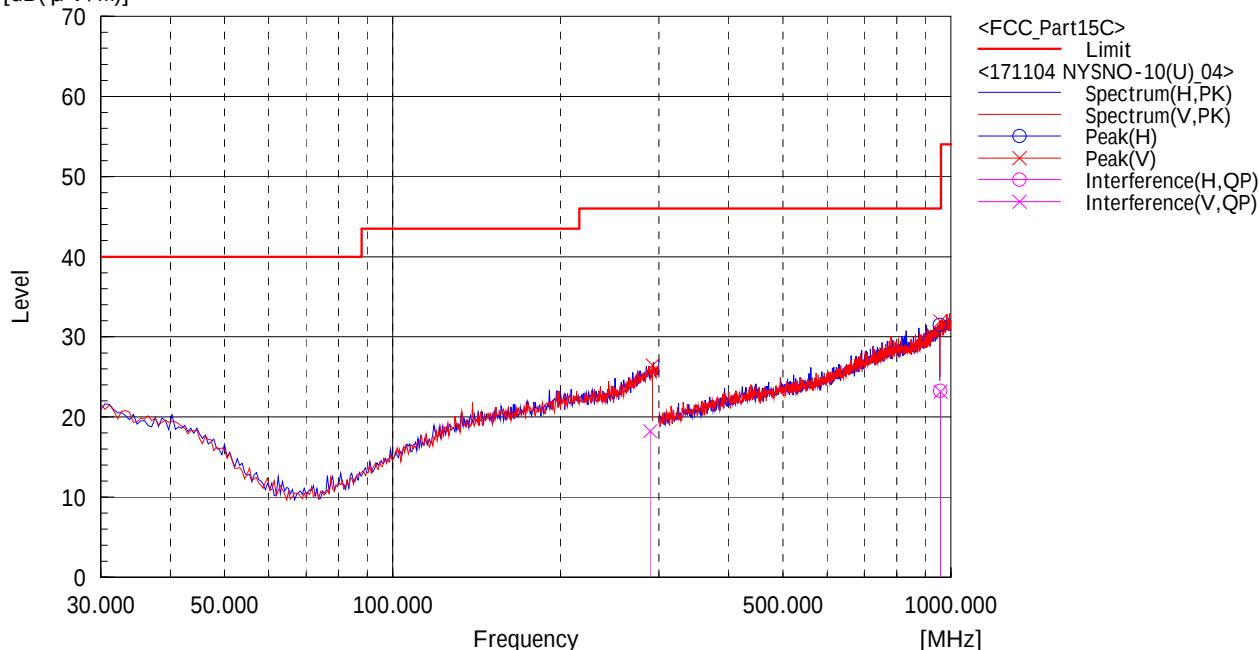
[EDR(3DH3)/2480MHz]

Sony Global M&O Corp
Kisarazu DTS

<<Radiated Emission>>

Model : NYSNO-10
Serial : 5001062
Operator : T.NAKAMURA
Power : DC 3.6 V
Temp./Hum. : 21deg / 62%Limit : FCC Part15C 15.209(a) 3m
Remark1 :
Remark2 : Z
Remark3 : High
Remark4 : 3DH3

[dB(μV/m)]



Final Result

--- Horizontal Polarization (QP)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	957.140	24.2	-0.9	23.3	46.0	22.7	228.8	245.6

--- Vertical Polarization (QP)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	289.420	24.3	-6.1	18.2	46.0	27.8	229.9	337.7
2	957.620	24.1	-0.9	23.2	46.0	22.8	209.7	338.0

1GHz - 6 GHz

[BDR(DH5)/2402MHz]

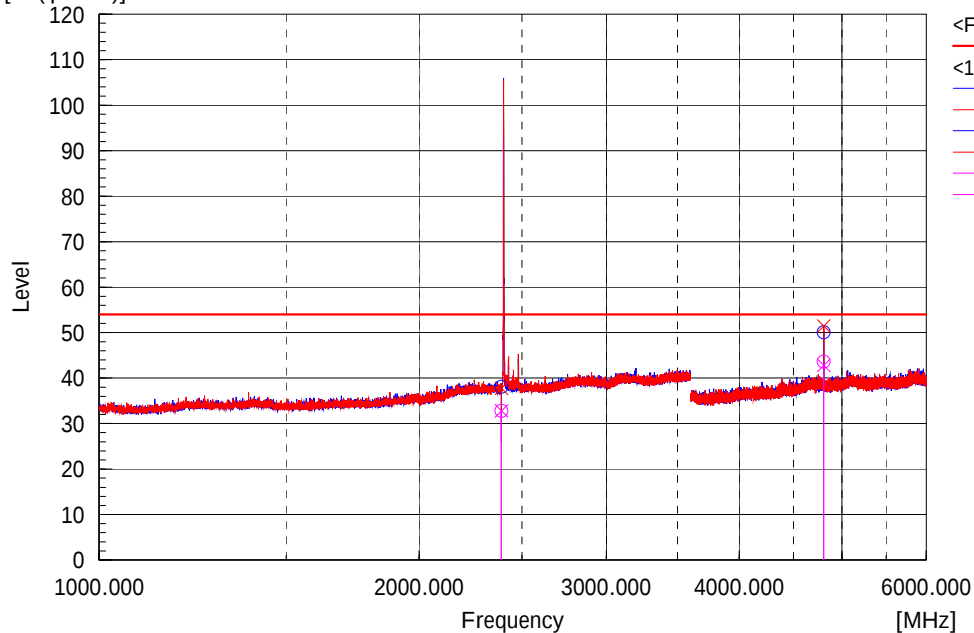
Sony Global M&O Corp
Kisarazu DTS

<<Radiated Emission>>

Model : NYSNO-10
 Serial : 5001062
 Operator : M.KOUGA
 Power : DC 3.6 V
 Temp./Hum. : 20deg / 59%

Limit : FCC Part15C 15.209(a) 3m
 Remark1 :
 Remark2 : Z
 Remark3 : Low
 Remark4 : DH5

[dB(μV/m)]

**Final Result**

--- Horizontal Polarization (AV)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	2390.000	34.9	-2.1	32.8	54.0	21.2	340.4	222.1
2	4804.019	41.1	2.5	43.6	54.0	10.4	100.0	284.4

--- Vertical Polarization (AV)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	2390.000	34.9	-2.1	32.8	54.0	21.2	249.8	7.0
2	4803.985	40.3	2.5	42.8	54.0	11.2	100.0	181.6

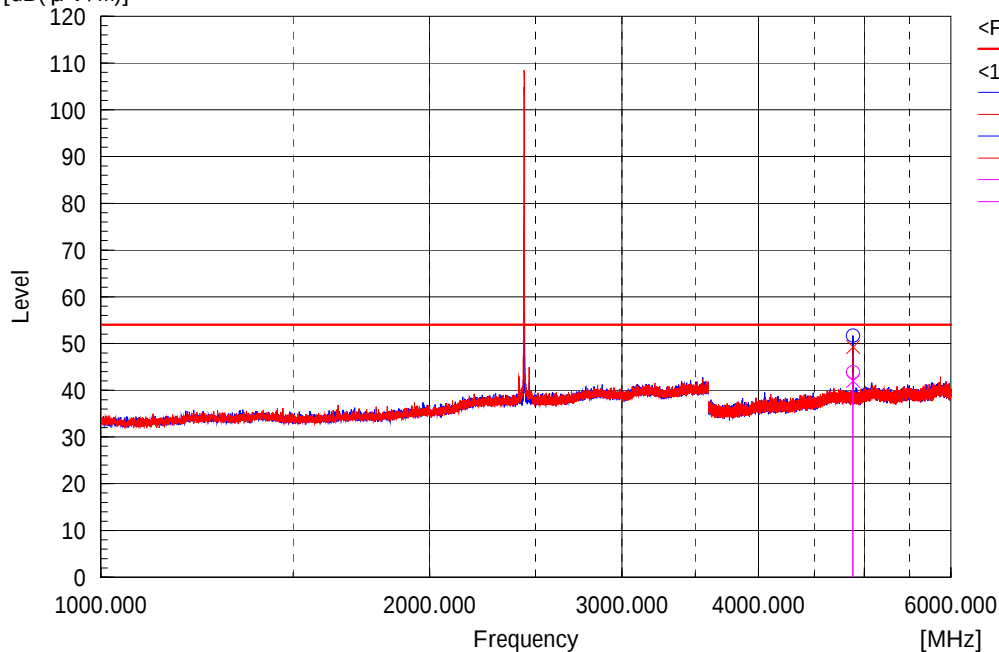
[BDR(DH5)/2441MHz]

Sony Global M&O Corp
Kisarazu DTS

<<Radiated Emission>>

Model : NYSNO-10
Serial : 5001062
Operator : M.KOUGA
Power : DC 3.6 V
Temp./Hum. : 20deg / 59%Limit : FCC Part15C 15.209(a) 3m
Remark1 :
Remark2 : Z
Remark3 : Mid
Remark4 : DH5

[dB(μV/m)]



Final Result

--- Horizontal Polarization (AV)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	4882.009	41.5	2.4	43.9	54.0	10.1	385.8	112.2

--- Vertical Polarization (AV)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	4881.959	39.6	2.4	42.0	54.0	12.0	183.5	348.2

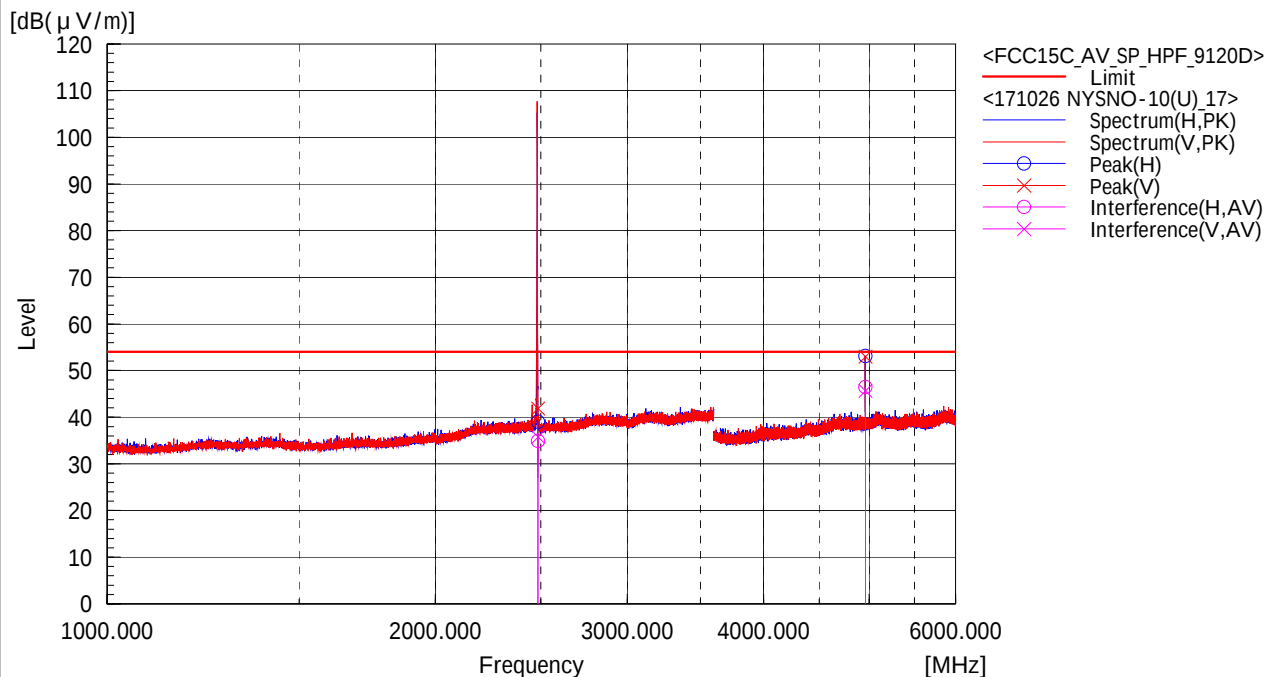
[BDR(DH5)/2480MHz]

Sony Global M&O Corp
Kisarazu DTS

<<Radiated Emission>>

Model : NYSNO-10
 Serial : 5001062
 Operator : M.KOUGA
 Power : DC 3.6 V
 Temp./Hum. : 20deg / 59%

Limit : FCC Part15C 15.209(a) 3m
 Remark1 :
 Remark2 : Z
 Remark3 : High
 Remark4 : DH5



Final Result

--- Horizontal Polarization (AV)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	2483.500	36.7	-1.8	34.9	54.0	19.1	360.0	221.2
2	4960.024	44.0	2.5	46.5	54.0	7.5	300.2	115.0

--- Vertical Polarization (AV)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	2483.500	37.6	-1.8	35.8	54.0	18.2	160.0	165.3
2	4959.990	43.2	2.5	45.7	54.0	8.3	159.6	164.6

[BDR(DH5)/2402MHz]

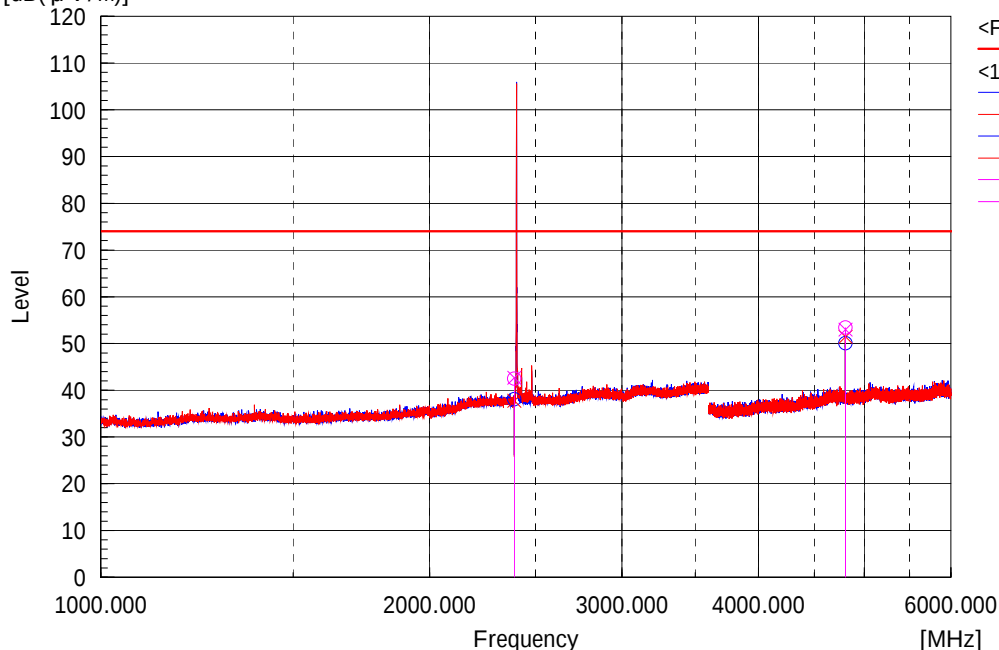
Sony Global M&O Corp
Kisarazu DTS

<<Radiated Emission>>

Model : NYSNO-10
 Serial : 5001062
 Operator : M.KOUGA
 Power : DC 3.6 V
 Temp./Hum. : 20deg / 59%

Limit : FCC Part15C 15.209(a) 3m
 Remark1 :
 Remark2 : Z
 Remark3 : Low
 Remark4 : DH5

[dB(μV/m)]



<FCC15C_PK_SP_HPF_9120D>
 Limit
 <171026 NYSNO-10(U)_05>
 Spectrum(H,PK)
 Spectrum(V,PK)
 Peak(H)
 Peak(V)
 Interference(H,PK)
 Interference(V,PK)

Final Result

--- Horizontal Polarization (PK)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	2390.000	44.6	-2.1	42.5	74.0	31.5	328.0	220.5
2	4804.285	51.0	2.5	53.5	74.0	20.5	100.0	289.1

--- Vertical Polarization (PK)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	2390.000	44.8	-2.1	42.7	74.0	31.3	249.8	8.6
2	4804.371	50.5	2.5	53.0	74.0	21.0	100.0	182.2

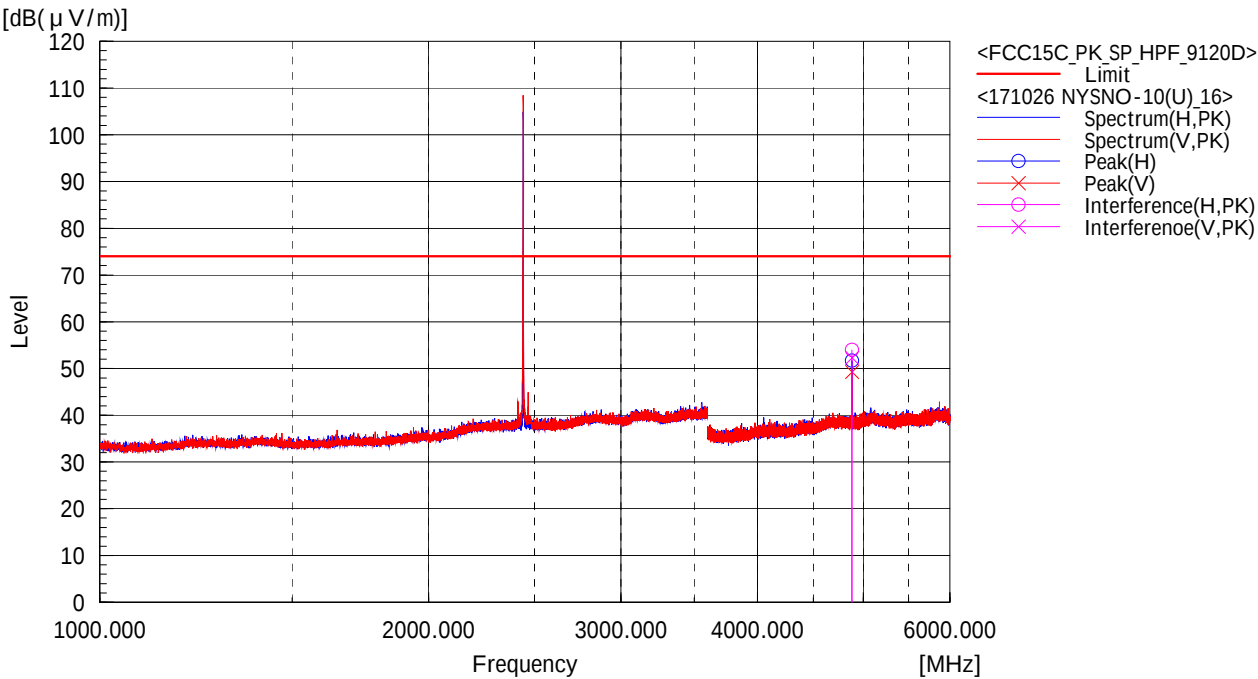
[BDR(DH5)/2441MHz]

Sony Global M&O Corp
Kisarazu DTS

<<Radiated Emission>>

Model : NYSNO-10
Serial : 5001062
Operator : M.KOUGA
Power : DC 3.6 V
Temp./Hum. : 20deg / 59%

Limit : FCC Part15C 15.209(a) 3m
Remark1 :
Remark2 : Z
Remark3 : Mid
Remark4 : DH5



Final Result

--- Horizontal Polarization (PK)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	4882.388	51.6	2.4	54.0	74.0	20.0	385.0	112.2

--- Vertical Polarization (PK)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	4881.571	49.9	2.4	52.3	74.0	21.7	185.0	348.2

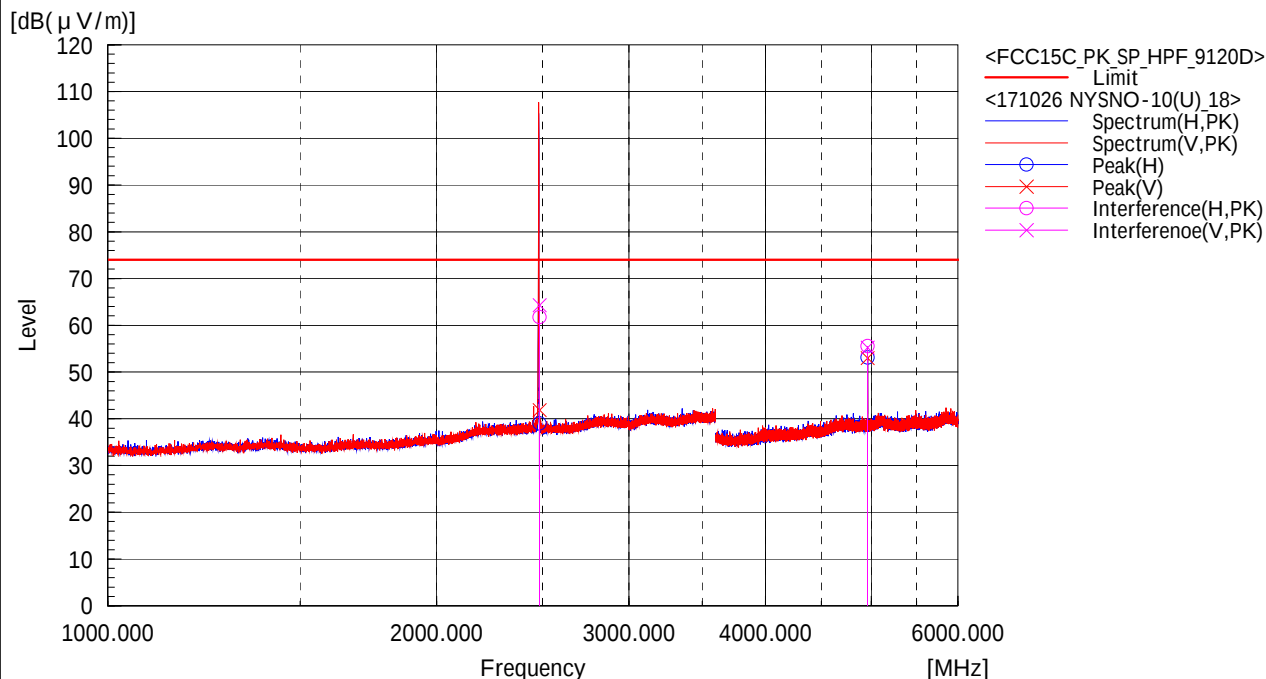
[BDR(DH5)/2480MHz]

Sony Global M&O Corp
Kisarazu DTS

<<Radiated Emission>>

Model : NYSNO-10
 Serial : 5001062
 Operator : M.KOUGA
 Power : DC 3.6 V
 Temp./Hum. : 20deg / 59%

Limit : FCC Part15C 15.209(a) 3m
 Remark1 :
 Remark2 : Z
 Remark3 : High
 Remark4 : DH5



Final Result

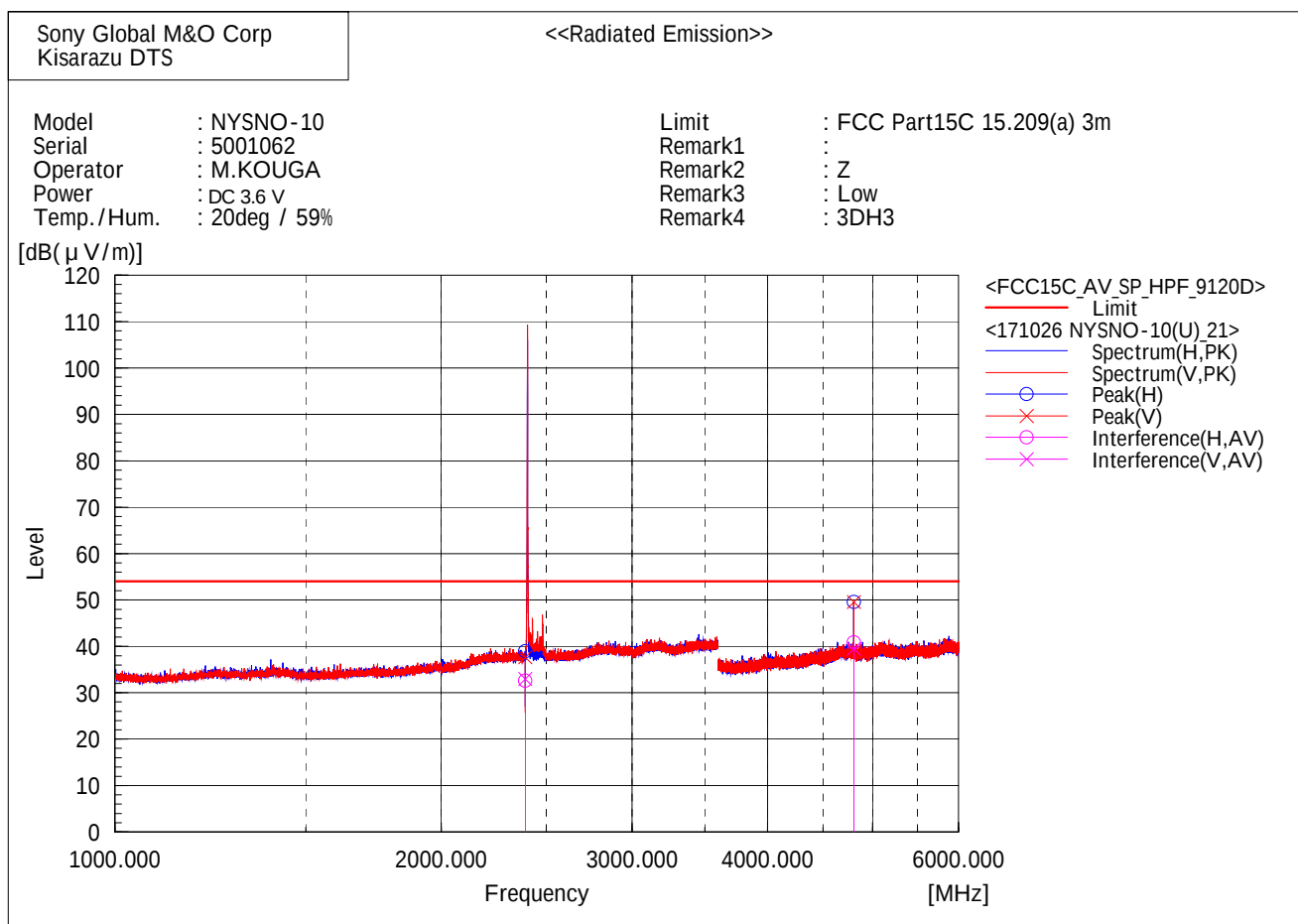
--- Horizontal Polarization (PK)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	2483.500	63.6	-1.8	61.8	74.0	12.2	360.0	221.2
2	4959.706	53.1	2.5	55.6	74.0	18.4	300.0	115.2

--- Vertical Polarization (PK)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	2483.500	66.1	-1.8	64.3	74.0	9.7	160.0	165.2
2	4960.252	52.7	2.5	55.2	74.0	18.8	160.0	164.2

[EDR(3DH3)/2402MHz]



Final Result

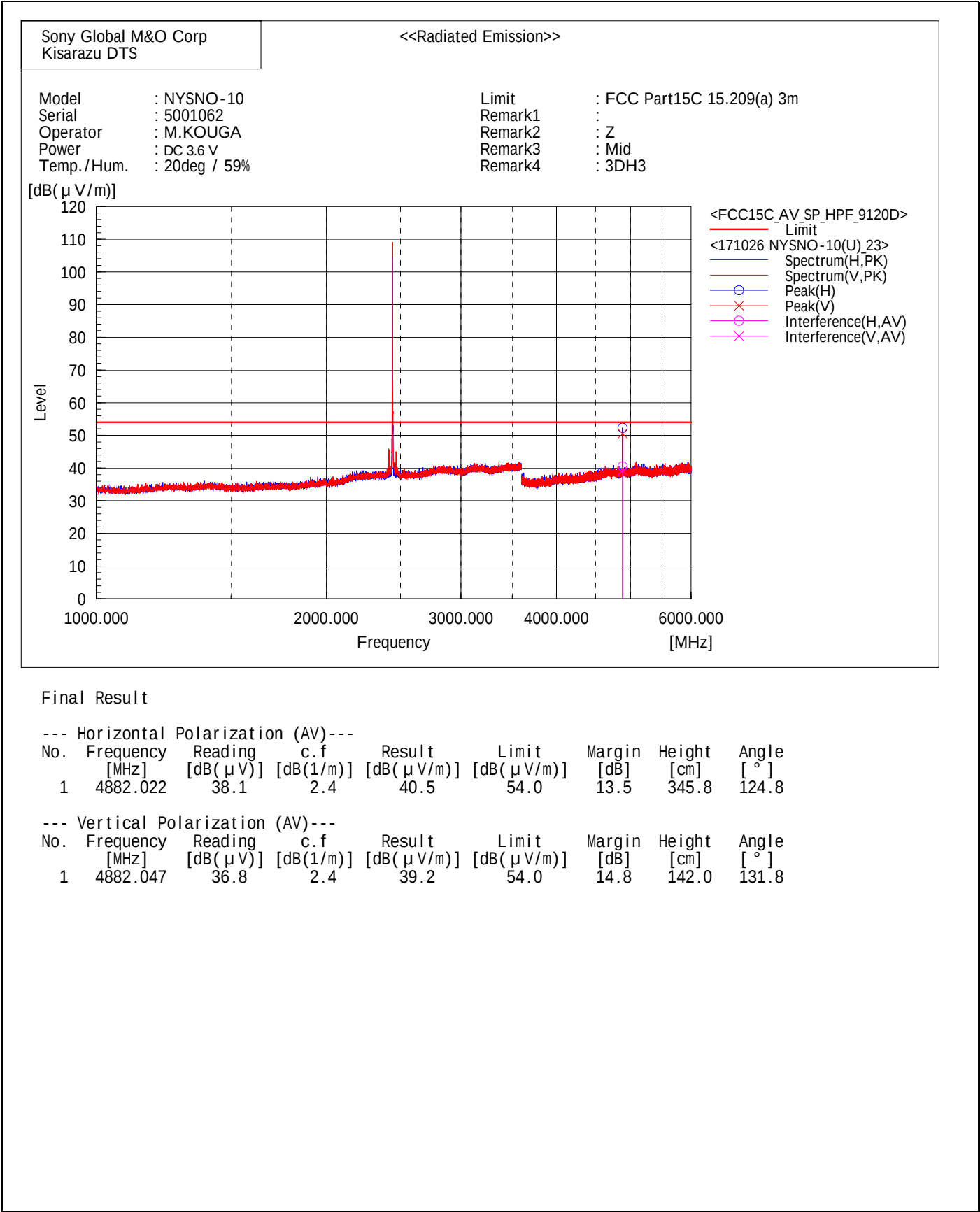
--- Horizontal Polarization (AV)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	2390.000	34.7	-2.1	32.6	54.0	21.4	266.9	150.5
2	4803.990	38.4	2.5	40.9	54.0	13.1	332.5	116.2

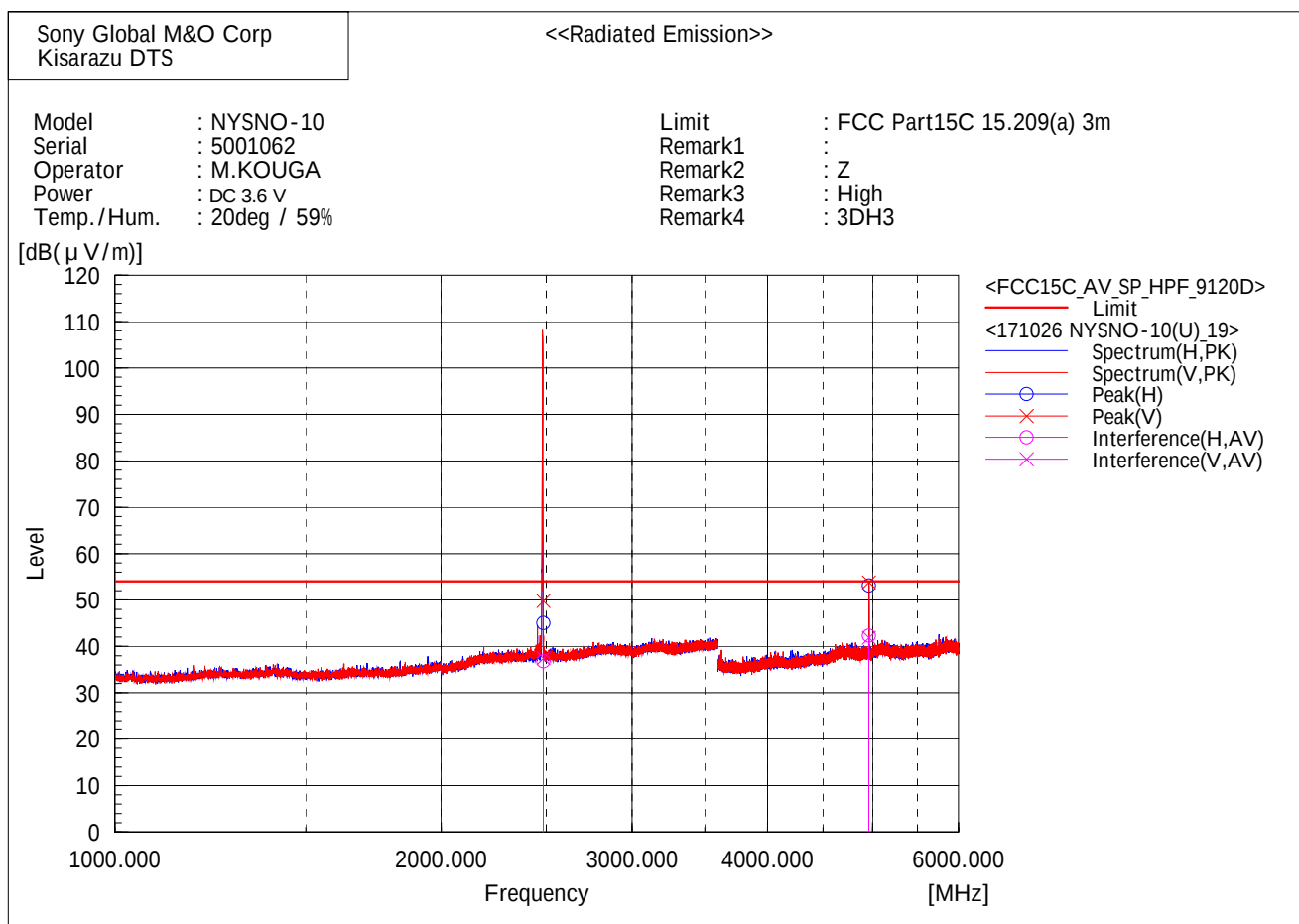
--- Vertical Polarization (AV)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	2390.000	35.1	-2.1	33.0	54.0	21.0	162.4	174.3
2	4804.062	37.0	2.5	39.5	54.0	14.5	159.0	169.1

[EDR(3DH3)/2441MHz]



[EDR(3DH3)/2480MHz]



Final Result

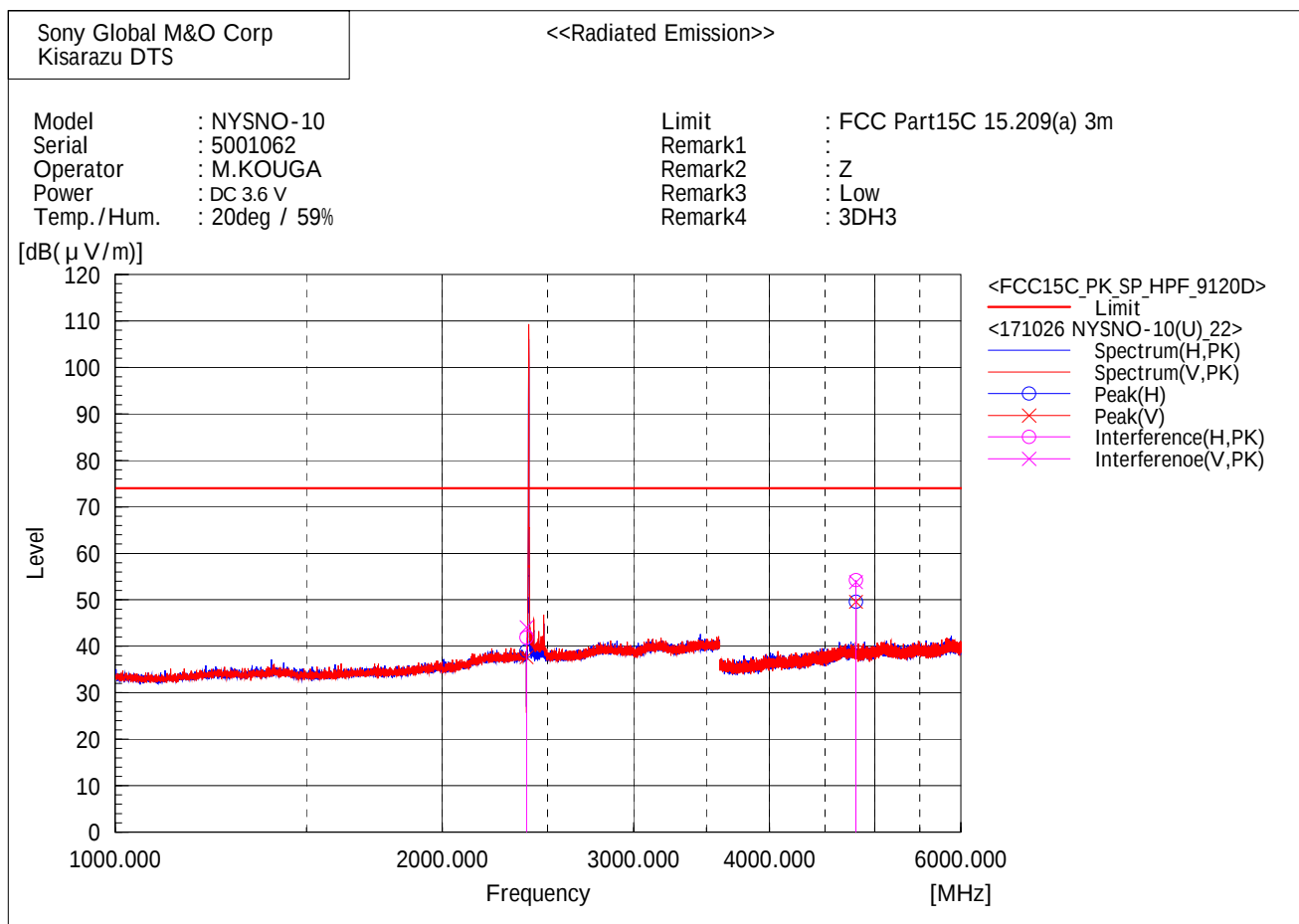
--- Horizontal Polarization (AV)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	2483.500	38.6	-1.8	36.8	54.0	17.2	400.0	240.0
2	4959.979	39.8	2.5	42.3	54.0	11.7	254.0	110.2

--- Vertical Polarization (AV)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	2483.500	39.3	-1.8	37.5	54.0	16.5	123.9	204.2
2	4959.973	39.4	2.5	41.9	54.0	12.1	148.0	144.4

[EDR(3DH3)/2402MHz]



Final Result

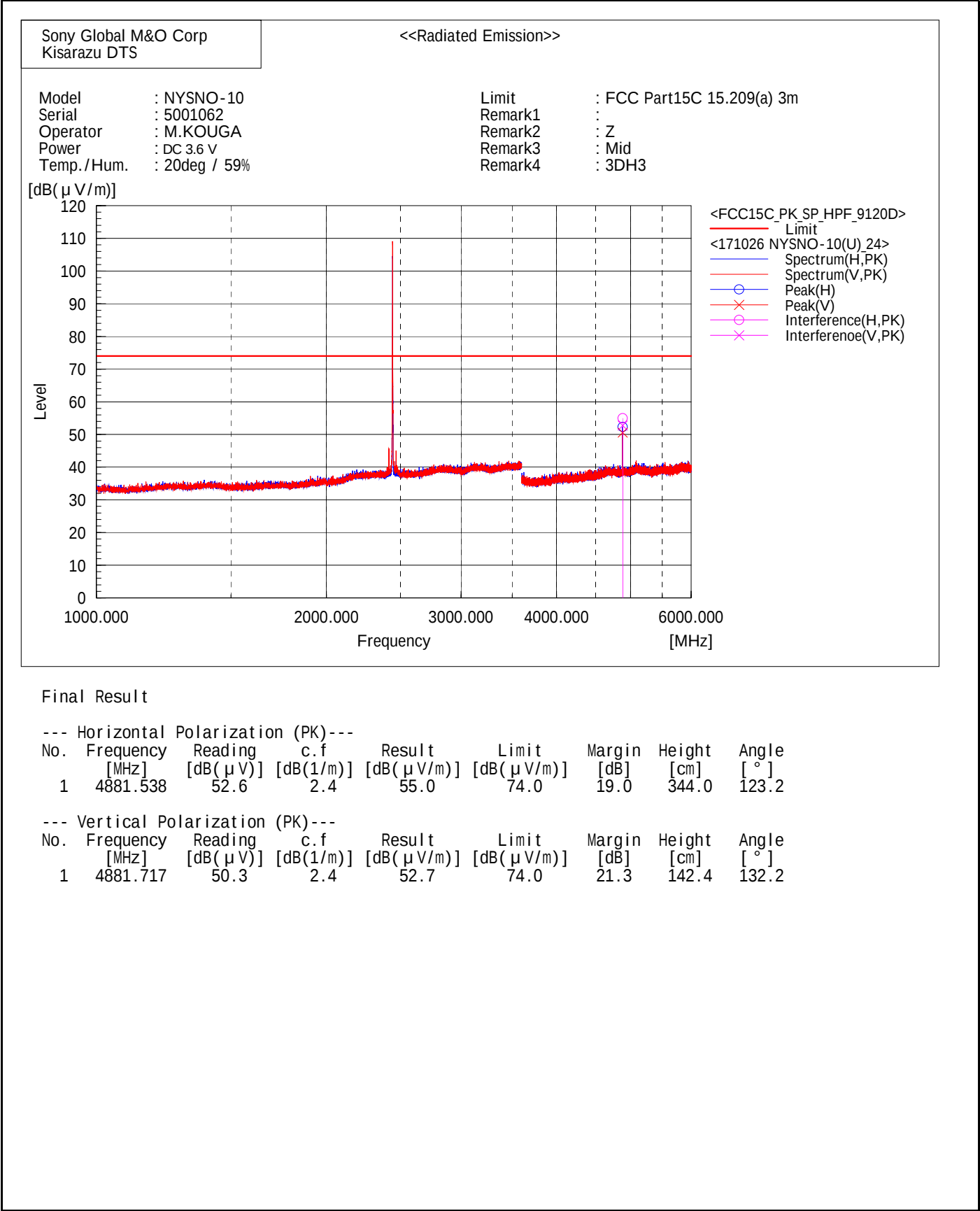
--- Horizontal Polarization (PK)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	2390.000	44.0	-2.1	41.9	74.0	32.1	265.1	150.7
2	4803.858	51.7	2.5	54.2	74.0	19.8	333.6	115.5

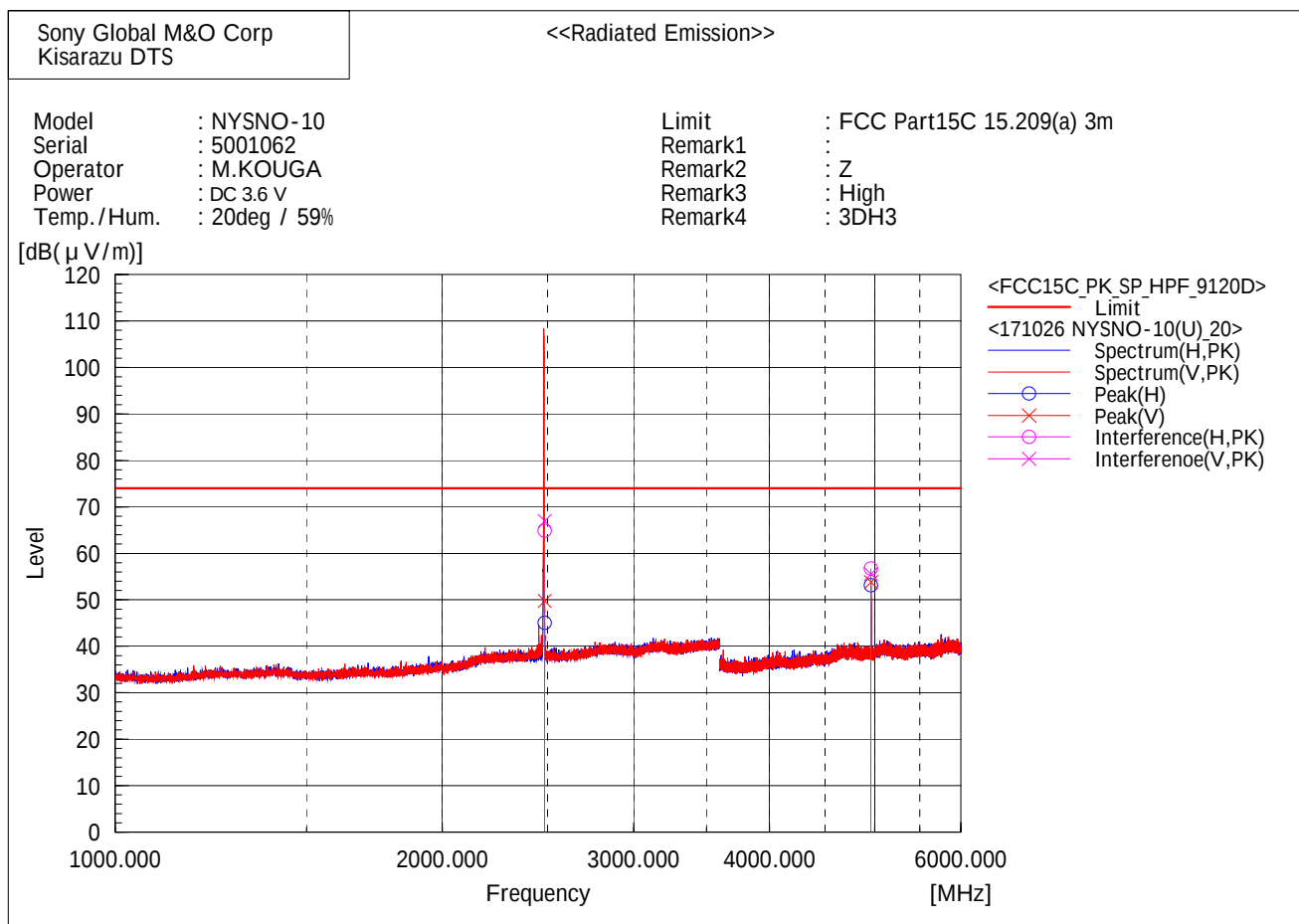
--- Vertical Polarization (PK)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	2390.000	46.2	-2.1	44.1	74.0	29.9	162.4	173.2
2	4803.911	51.3	2.5	53.8	74.0	20.2	160.0	168.2

[EDR(3DH3)/2441MHz]



[EDR(3DH3)/2480MHz]



Final Result

--- Horizontal Polarization (PK)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	2483.500	66.7	-1.8	64.9	74.0	9.1	400.0	241.2
2	4959.897	54.2	2.5	56.7	74.0	17.3	254.0	111.2

--- Vertical Polarization (PK)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	2483.500	68.8	-1.8	67.0	74.0	7.0	128.8	203.4
2	4959.788	53.0	2.5	55.5	74.0	18.5	148.3	146.6

6 GHz - 18 GHz

[BDR(DH5)/2402MHz]

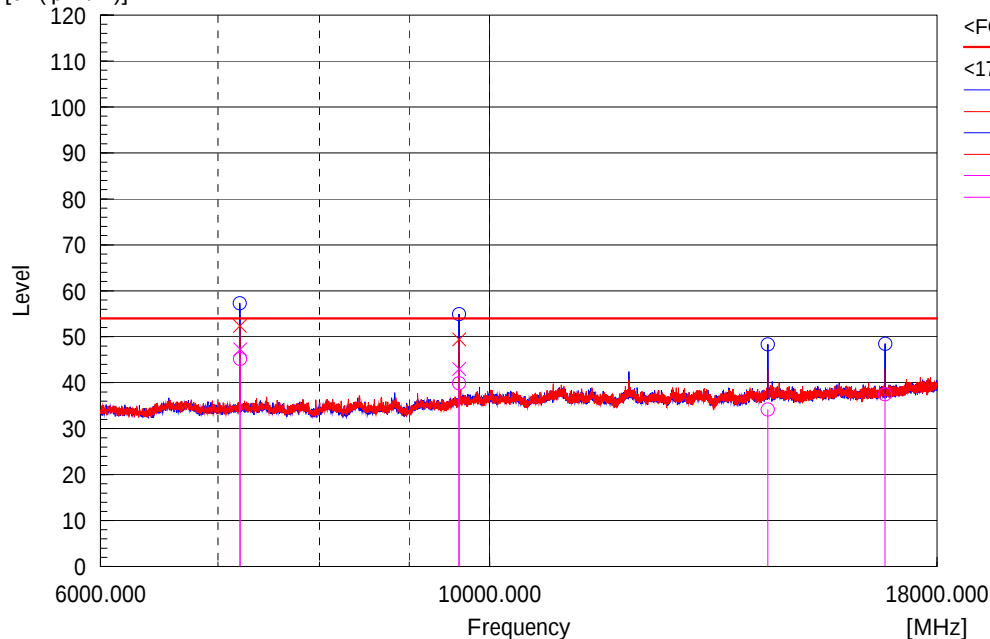
Sony Global M&O Corp
Kisarazu DTS

<<Radiated Emission>>

Model : NYSNO-10
 Serial : 5001062
 Operator : T.NAKAMURA
 Power : DC 3.6 V
 Temp./Hum. : 19deg / 49%

Limit : FCC Part15C 15.209(a) 3m
 Remark1 :
 Remark2 : Y
 Remark3 : Low
 Remark4 : DH5

[dB(μV/m)]



<FCC15C_AV_SP_HAP-W>
 Limit
 <171101 NYSNO-10(U)_04>
 Spectrum(H,PK)
 Spectrum(V,PK)
 Peak(H)
 Peak(V)
 Interference(H,AV)
 Interference(V,AV)

Final Result

--- Horizontal Polarization (AV)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	7206.011	54.1	-8.9	45.2	54.0	8.8	111.1	253.8
2	9607.962	45.2	-5.3	39.9	54.0	14.1	250.8	283.1
3	14412.587	38.4	-4.2	34.2	54.0	19.8	418.4	339.1
4	16813.274	39.4	-1.9	37.5	54.0	16.5	100.0	262.2

--- Vertical Polarization (AV)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	7205.994	56.2	-8.9	47.3	54.0	6.7	395.3	243.8
2	9607.981	48.3	-5.3	43.0	54.0	11.0	431.0	240.9

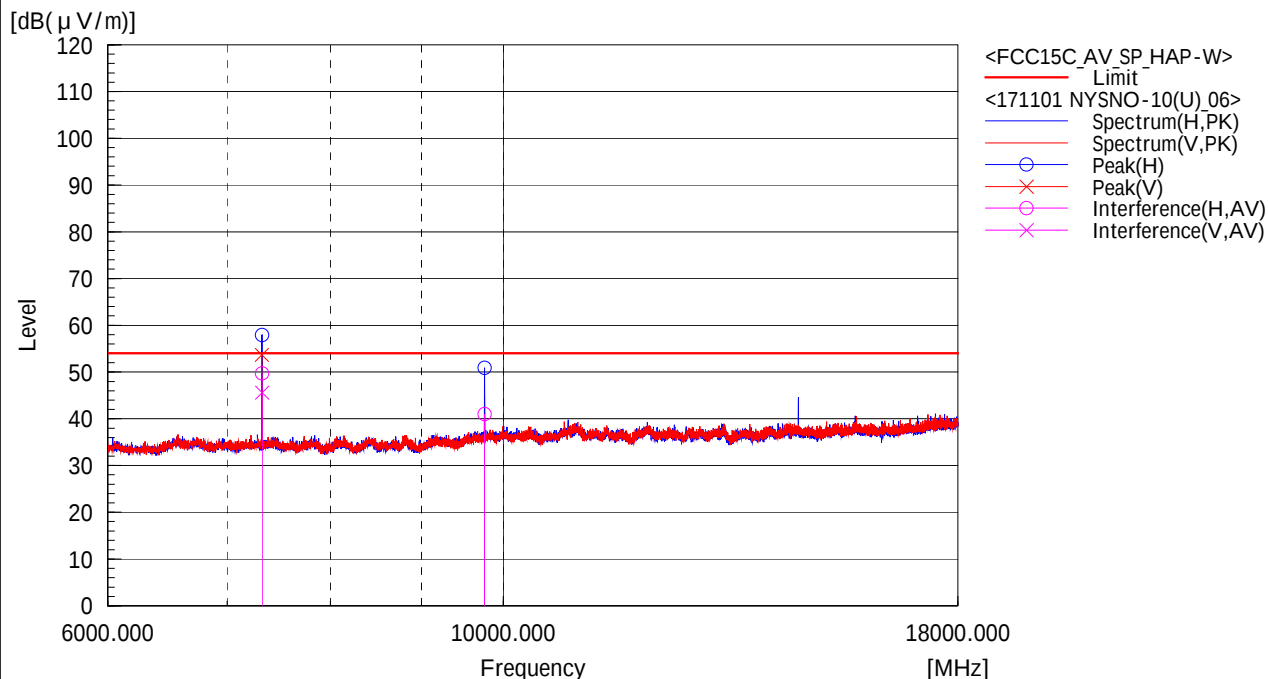
[BDR(DH5)/2441MHz]

Sony Global M&O Corp
Kisarazu DTS

<<Radiated Emission>>

Model : NYSNO-10
 Serial : 5001062
 Operator : T.NAKAMURA
 Power : DC 3.6 V
 Temp./Hum. : 19deg / 49%

Limit : FCC Part15C 15.209(a) 3m
 Remark1 :
 Remark2 : Y
 Remark3 : Mid
 Remark4 : DH5



Final Result

--- Horizontal Polarization (AV)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	7322.975	58.4	-8.7	49.7	54.0	4.3	264.0	313.4
2	9764.024	45.8	-4.8	41.0	54.0	13.0	100.0	246.0

--- Vertical Polarization (AV)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	7322.984	54.3	-8.7	45.6	54.0	8.4	241.6	264.6

[BDR(DH5)/2480MHz]

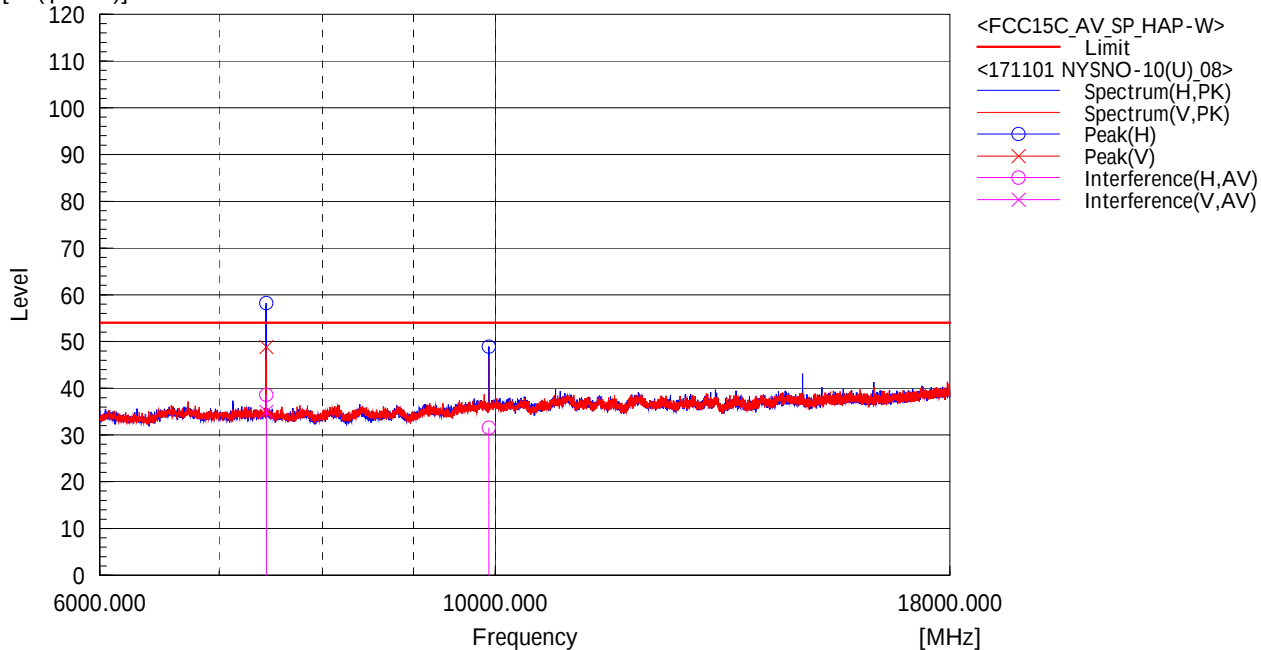
Sony Global M&O Corp
Kisarazu DTS

<<Radiated Emission>>

Model : NYSNO-10
 Serial : 5001062
 Operator : T.NAKAMURA
 Power : DC 3.6 V
 Temp./Hum. : 19deg / 49%

Limit : FCC Part15C 15.209(a) 3m
 Remark1 :
 Remark2 : Y
 Remark3 : High
 Remark4 : DH5

[dB(μV/m)]



Final Result

--- Horizontal Polarization (AV)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	7440.295	47.3	-8.7	38.6	54.0	15.4	277.0	323.9
2	9919.926	36.2	-4.6	31.6	54.0	22.4	258.8	314.2

--- Vertical Polarization (AV)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	7440.273	43.7	-8.7	35.0	54.0	19.0	228.3	251.3

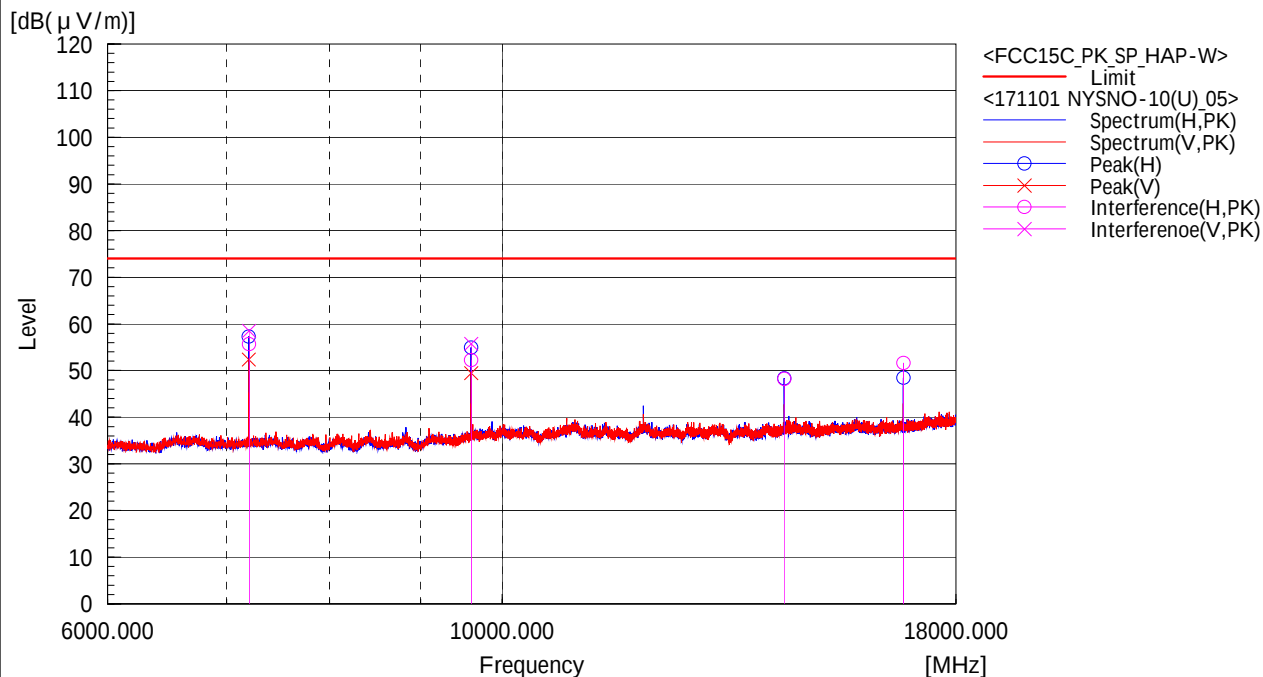
[BDR(DH5)/2402MHz]

Sony Global M&O Corp
Kisarazu DTS

<<Radiated Emission>>

Model : NYSNO-10
 Serial : 5001062
 Operator : T.NAKAMURA
 Power : DC 3.6 V
 Temp./Hum. : 19deg / 49%

Limit : FCC Part15C 15.209(a) 3m
 Remark1 :
 Remark2 : Y
 Remark3 : Low
 Remark4 : DH5



Final Result

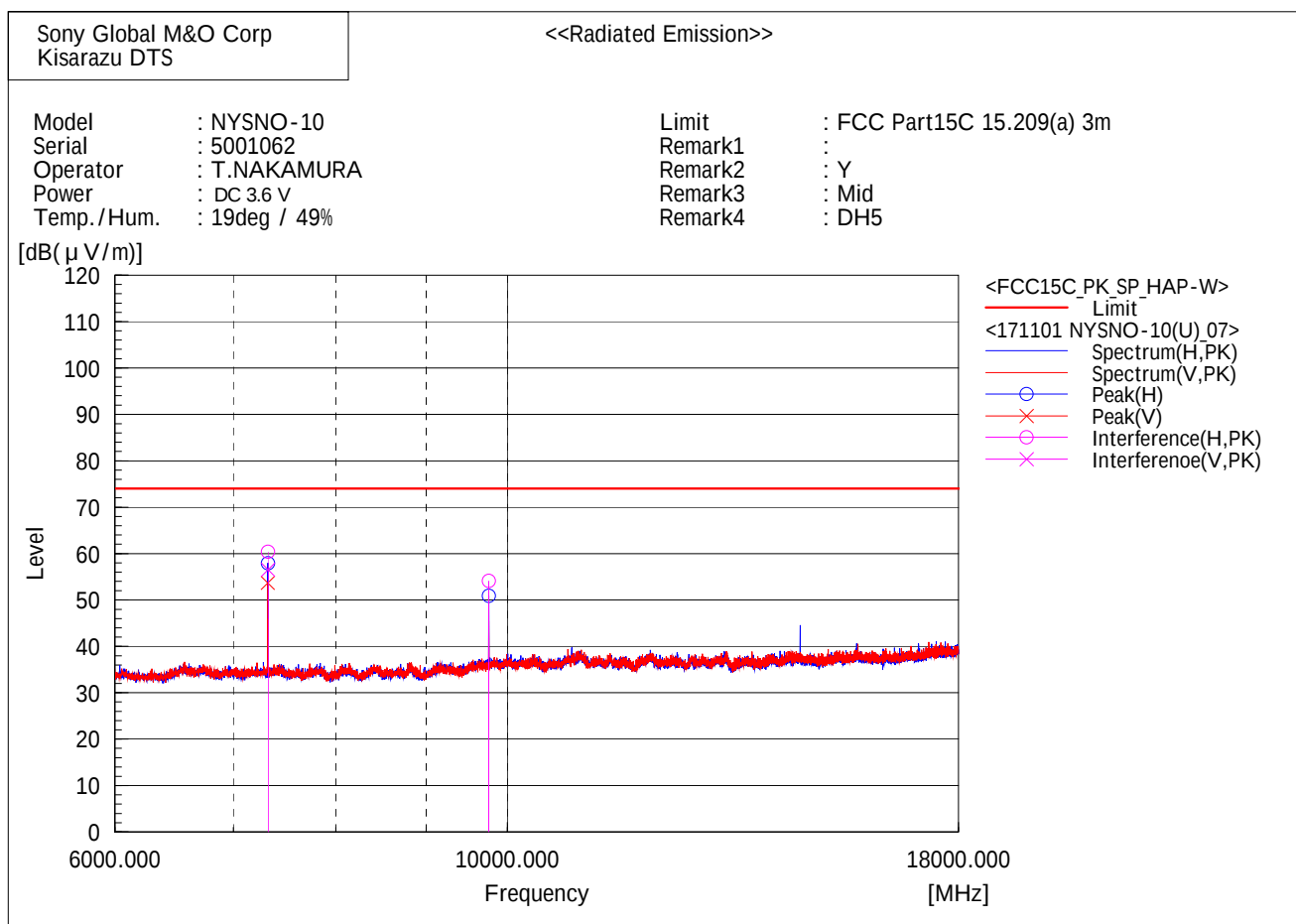
--- Horizontal Polarization (PK)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	7205.989	64.6	-8.9	55.7	74.0	18.3	105.6	255.0
2	9608.624	57.6	-5.3	52.3	74.0	21.7	246.7	285.2
3	14413.312	52.5	-4.2	48.3	74.0	25.7	415.2	337.2
4	16815.118	53.5	-1.9	51.6	74.0	22.4	100.0	264.8

--- Vertical Polarization (PK)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	7206.067	67.4	-8.9	58.5	74.0	15.5	395.8	244.8
2	9607.954	61.0	-5.3	55.7	74.0	18.3	431.0	241.8

[BDR(DH5)/2441MHz]



Final Result

--- Horizontal Polarization (PK)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	7322.993	69.1	-8.7	60.4	74.0	13.6	266.6	313.2
2	9763.248	58.9	-4.8	54.1	74.0	19.9	100.0	240.9

--- Vertical Polarization (PK)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	7322.499	65.3	-8.7	56.6	74.0	17.4	245.2	262.8

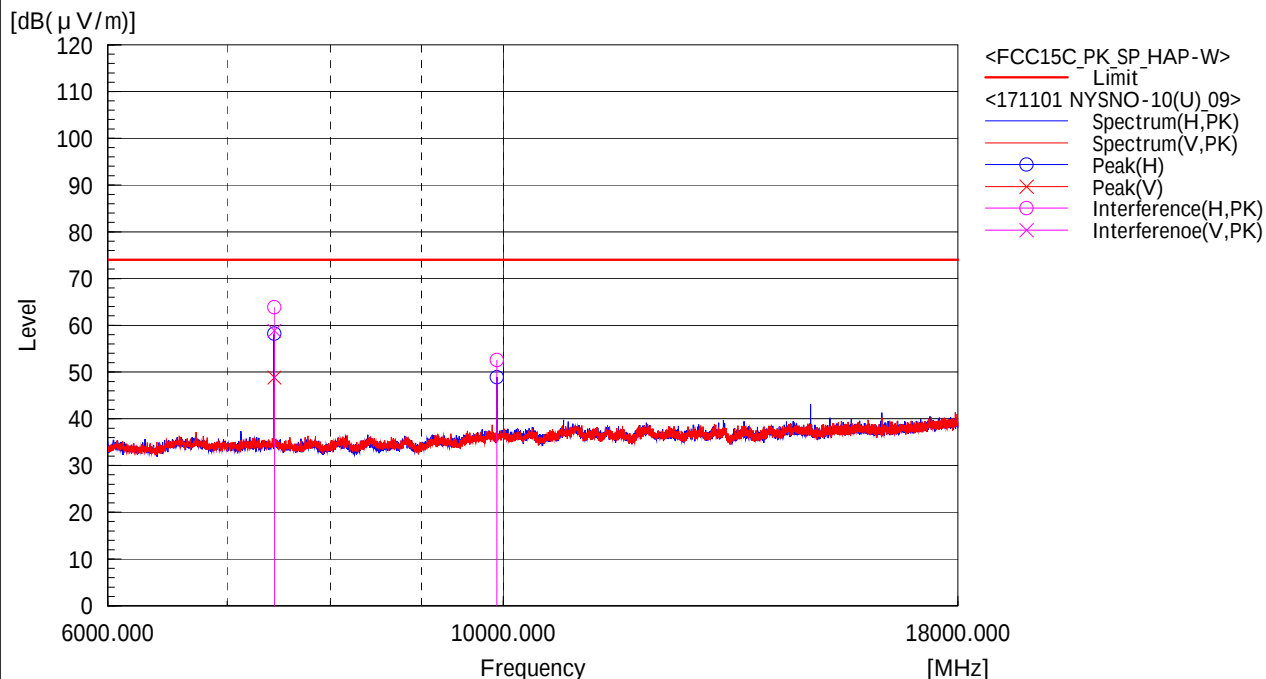
[BDR(DH5)/2480MHz]

Sony Global M&O Corp
Kisarazu DTS

<<Radiated Emission>>

Model : NYSNO-10
 Serial : 5001062
 Operator : T.NAKAMURA
 Power : DC 3.6 V
 Temp./Hum. : 19deg / 49%

Limit : FCC Part15C 15.209(a) 3m
 Remark1 :
 Remark2 : Y
 Remark3 : High
 Remark4 : DH5



Final Result

--- Horizontal Polarization (PK)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	7439.491	72.6	-8.7	63.9	74.0	10.1	277.6	320.5
2	9919.367	57.2	-4.6	52.6	74.0	21.4	261.6	309.7

--- Vertical Polarization (PK)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	7439.556	67.5	-8.7	58.8	74.0	15.2	227.9	251.3

[EDR(3DH3)/2402MHz]

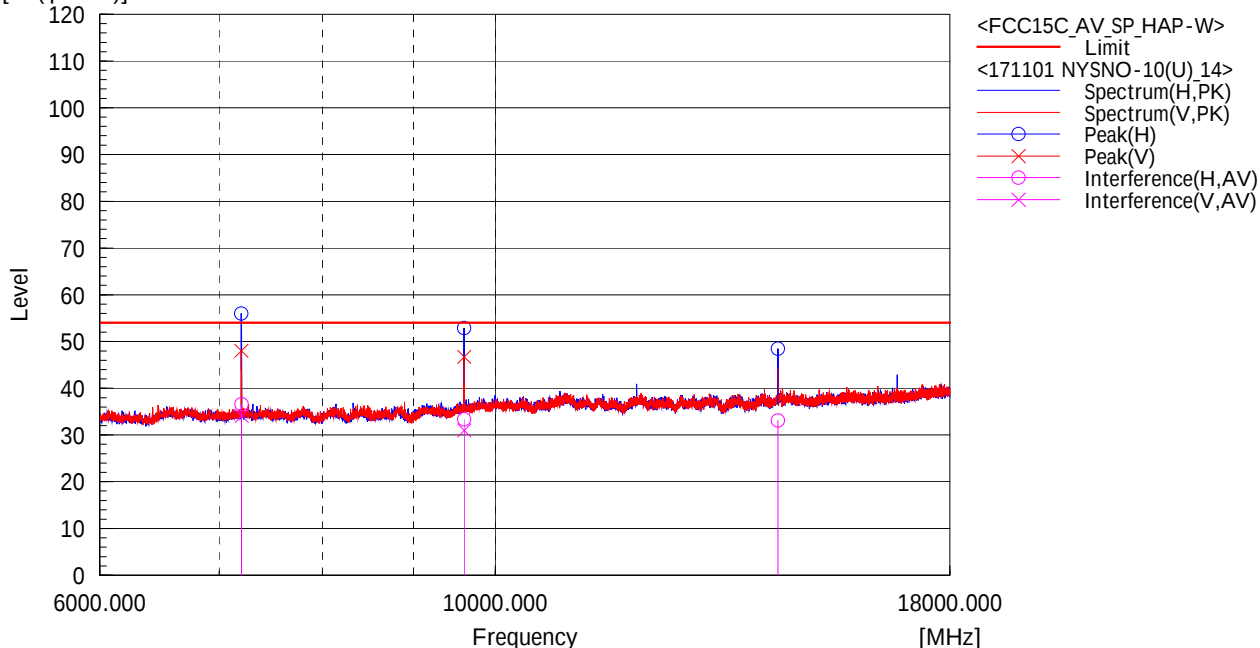
Sony Global M&O Corp
Kisarazu DTS

<<Radiated Emission>>

Model : NYSNO-10
 Serial : 5001062
 Operator : T.NAKAMURA
 Power : DC 3.6 V
 Temp./Hum. : 19deg / 49%

Limit : FCC Part15C 15.209(a) 3m
 Remark1 :
 Remark2 : Y
 Remark3 : Low
 Remark4 : 3DH3

[dB(μV/m)]



Final Result

--- Horizontal Polarization (AV)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	7206.037	45.5	-8.9	36.6	54.0	17.4	266.5	312.4
2	9607.982	38.7	-5.3	33.4	54.0	20.6	247.8	225.8
3	14411.940	37.3	-4.2	33.1	54.0	20.9	236.8	286.8

--- Vertical Polarization (AV)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	7206.069	43.0	-8.9	34.1	54.0	19.9	260.2	251.7
2	9608.064	36.3	-5.3	31.0	54.0	23.0	139.4	258.8

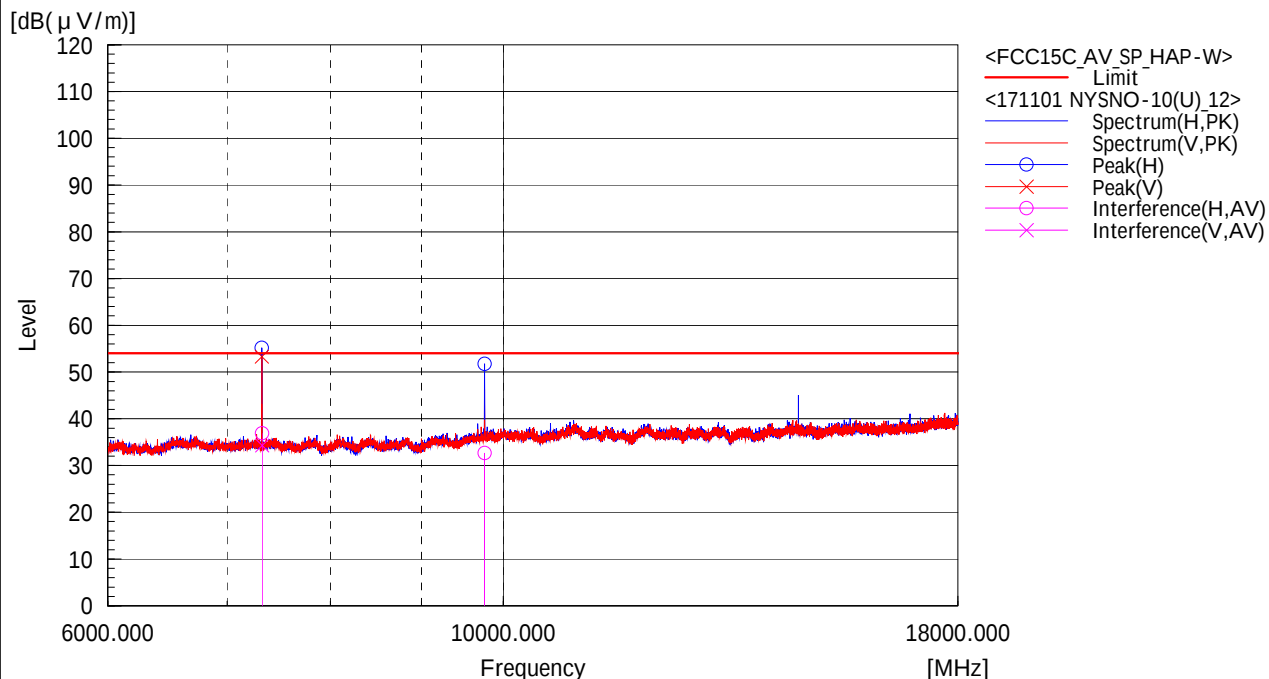
[EDR(3DH3)/2441MHz]

Sony Global M&O Corp
Kisarazu DTS

<<Radiated Emission>>

Model : NYSNO-10
 Serial : 5001062
 Operator : T.NAKAMURA
 Power : DC 3.6 V
 Temp./Hum. : 19deg / 49%

Limit : FCC Part15C 15.209(a) 3m
 Remark1 :
 Remark2 : Y
 Remark3 : Mid
 Remark4 : 3DH3



Final Result

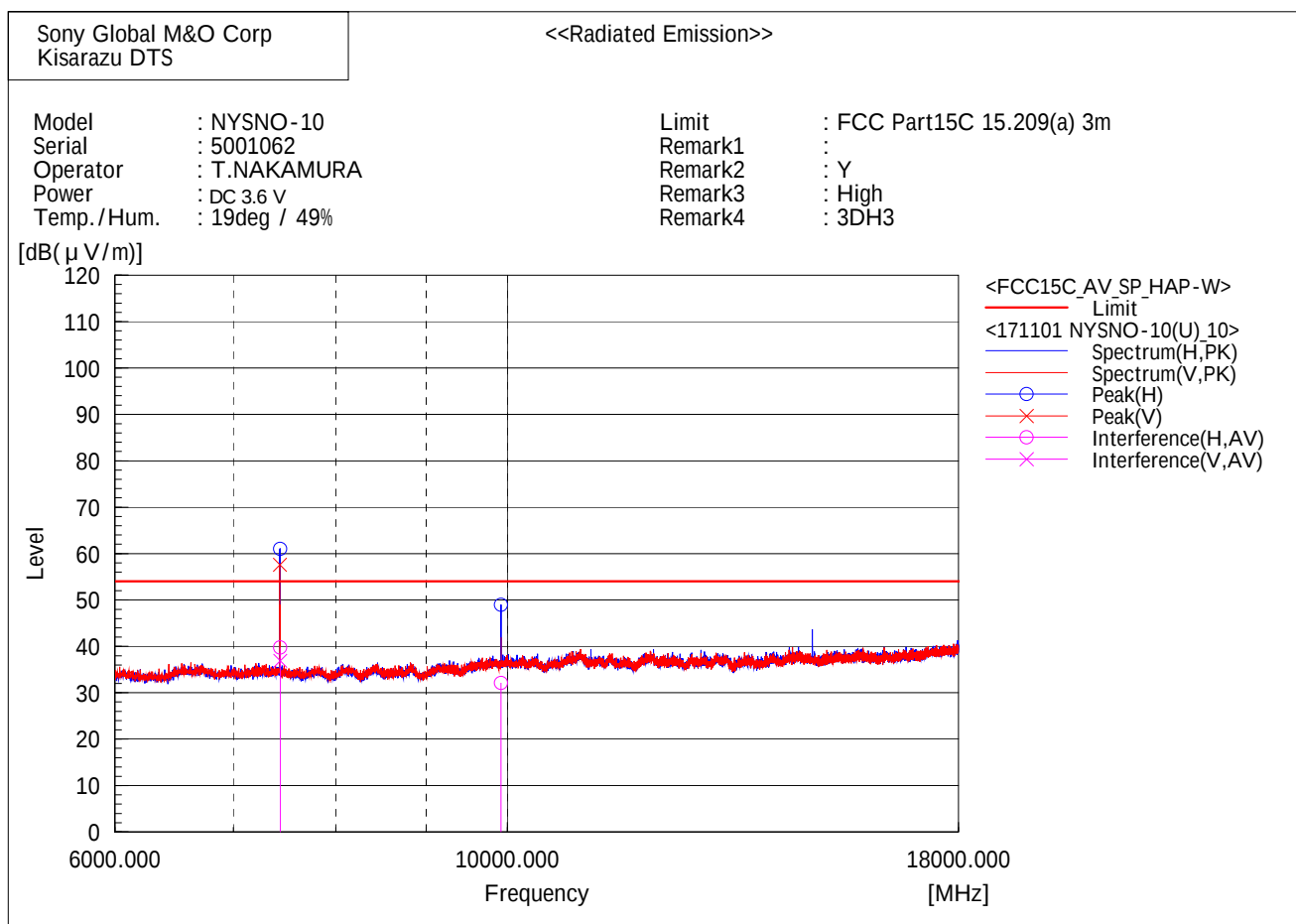
--- Horizontal Polarization (AV)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	7322.941	45.6	-8.7	36.9	54.0	17.1	266.8	318.8
2	9764.125	37.5	-4.8	32.7	54.0	21.3	100.0	243.1

--- Vertical Polarization (AV)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	7323.052	43.0	-8.7	34.3	54.0	19.7	267.0	252.1

[EDR(3DH3)/2480MHz]



Final Result

--- Horizontal Polarization (AV)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	7440.149	48.5	-8.7	39.8	54.0	14.2	277.5	313.9
2	9920.076	36.7	-4.6	32.1	54.0	21.9	287.6	308.3

--- Vertical Polarization (AV)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	7440.192	45.6	-8.7	36.9	54.0	17.1	266.5	256.8

[EDR(3DH3)/2402MHz]

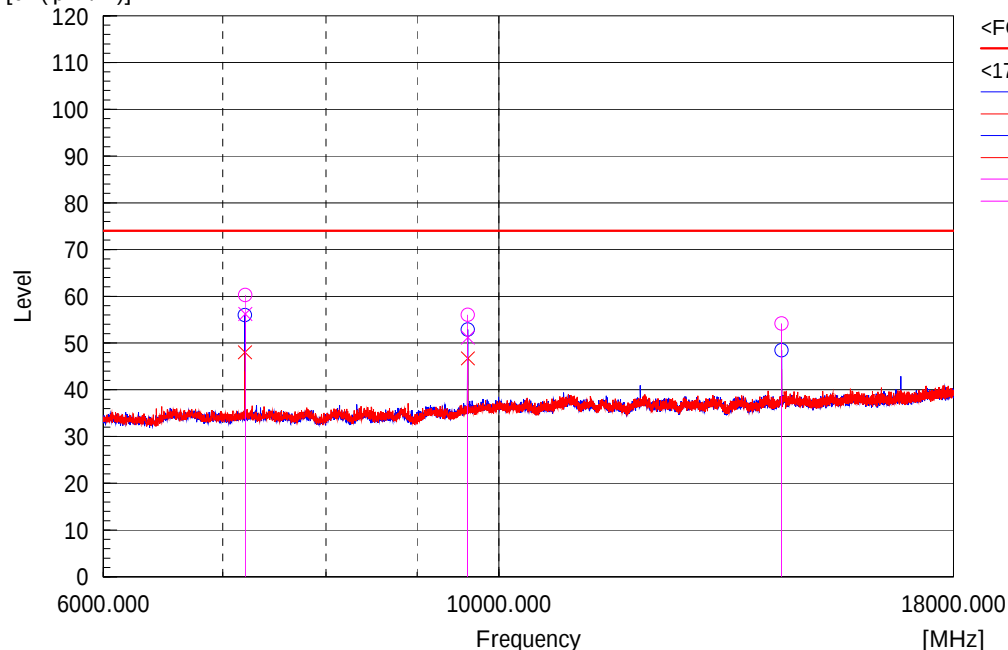
Sony Global M&O Corp
Kisarazu DTS

<<Radiated Emission>>

Model : NYSNO-10
 Serial : 5001062
 Operator : T.NAKAMURA
 Power : DC 3.6 V
 Temp./Hum. : 19deg / 49%

Limit : FCC Part15C 15.209(a) 3m
 Remark1 :
 Remark2 : Y
 Remark3 : Low
 Remark4 : 3DH3

[dB(μV/m)]



<FCC15C_PK_SP_HAP-W>

Limit

<171101 NYSNO-10(U)_15>

Spectrum(H,PK)

Spectrum(V,PK)

Peak(H)

Peak(V)

Interference(H,PK)

Interference(V,PK)

Final Result

--- Horizontal Polarization (PK)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	7206.035	69.2	-8.9	60.3	74.0	13.7	266.0	313.6
2	9608.741	61.3	-5.3	56.0	74.0	18.0	247.0	223.0
3	14412.017	58.4	-4.2	54.2	74.0	19.8	242.2	275.7

--- Vertical Polarization (PK)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	7206.052	65.2	-8.9	56.3	74.0	17.7	260.2	250.1
2	9608.607	56.5	-5.3	51.2	74.0	22.8	141.4	258.2

[EDR(3DH3)/2441MHz]

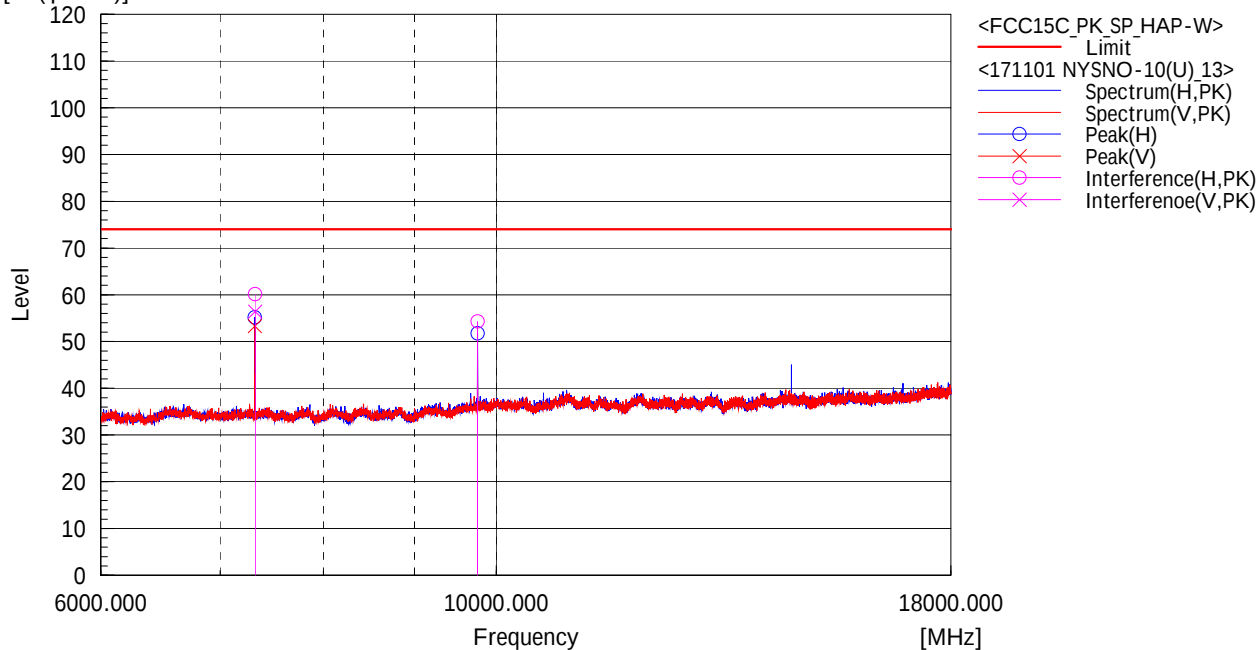
Sony Global M&O Corp
Kisarazu DTS

<<Radiated Emission>>

Model : NYSNO-10
 Serial : 5001062
 Operator : T.NAKAMURA
 Power : DC 3.6 V
 Temp./Hum. : 19deg / 49%

Limit : FCC Part15C 15.209(a) 3m
 Remark1 :
 Remark2 : Y
 Remark3 : Mid
 Remark4 : 3DH3

[dB(μV/m)]



Final Result

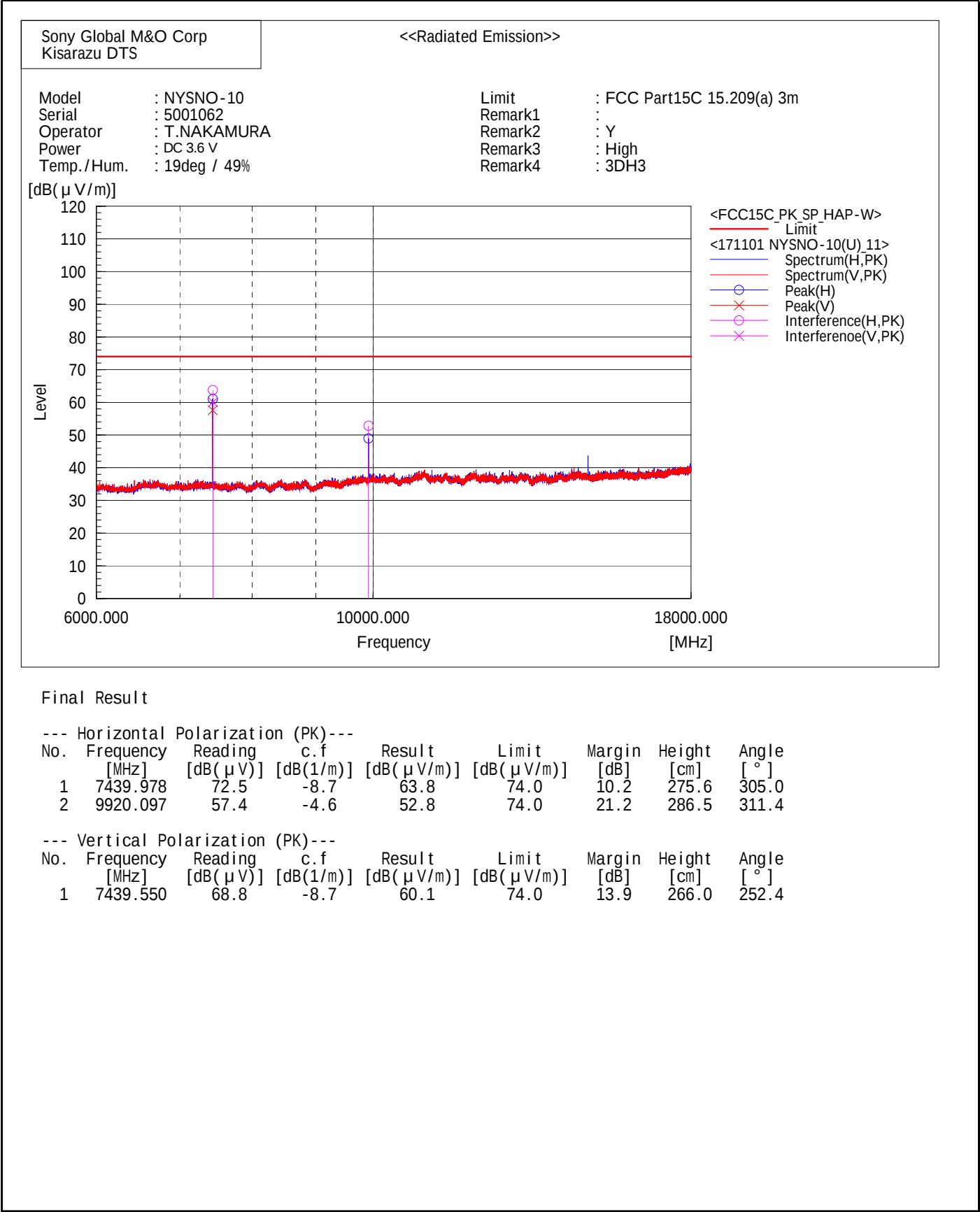
--- Horizontal Polarization (PK)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	7322.939	68.8	-8.7	60.1	74.0	13.9	266.5	315.8
2	9764.572	59.1	-4.8	54.3	74.0	19.7	100.0	231.3

--- Vertical Polarization (PK)---

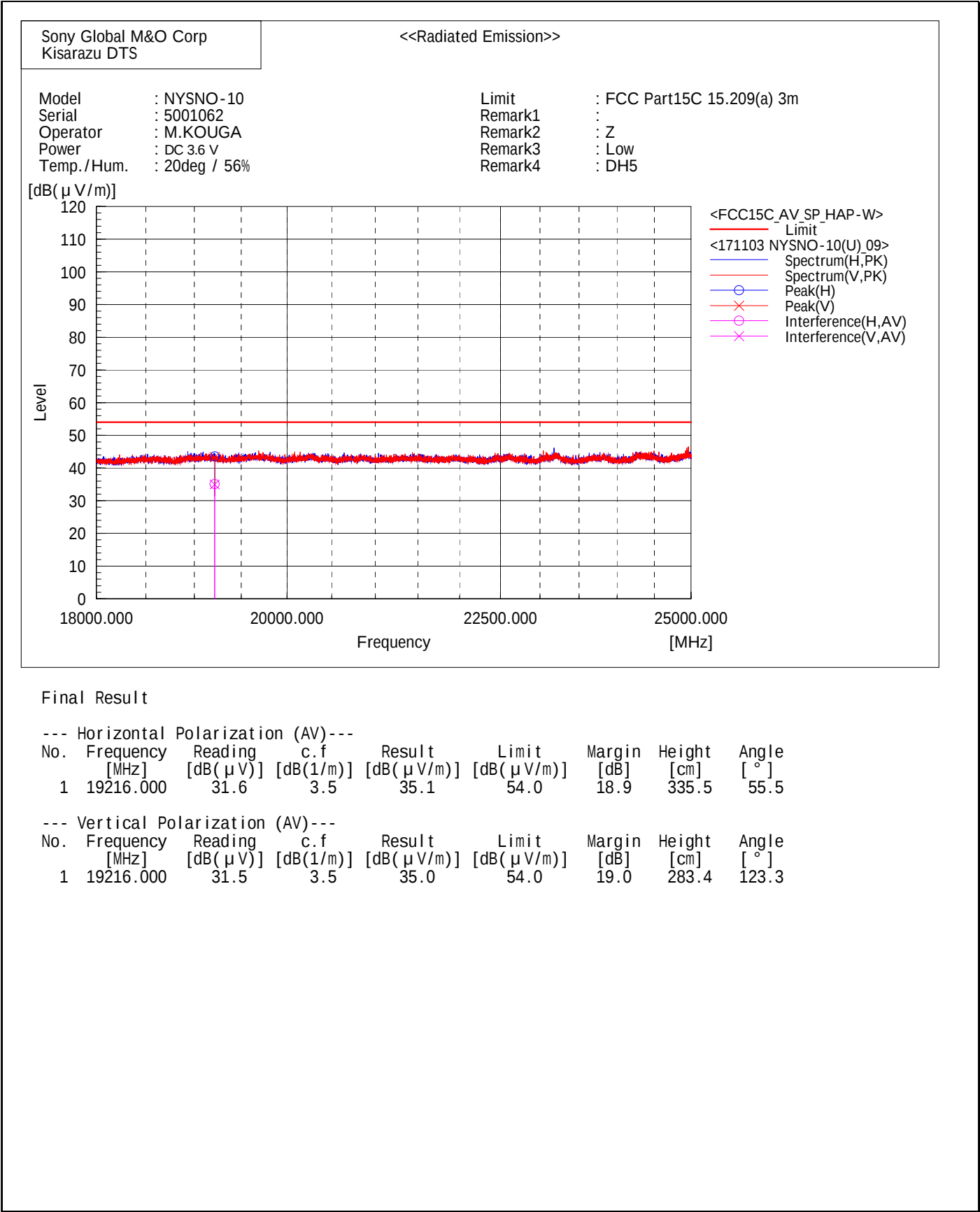
No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	7323.505	65.2	-8.7	56.5	74.0	17.5	271.6	257.8

[EDR(3DH3)/2480MHz]



18 GHz - 24.835 GHz

[BDR(DH5)/2402MHz]



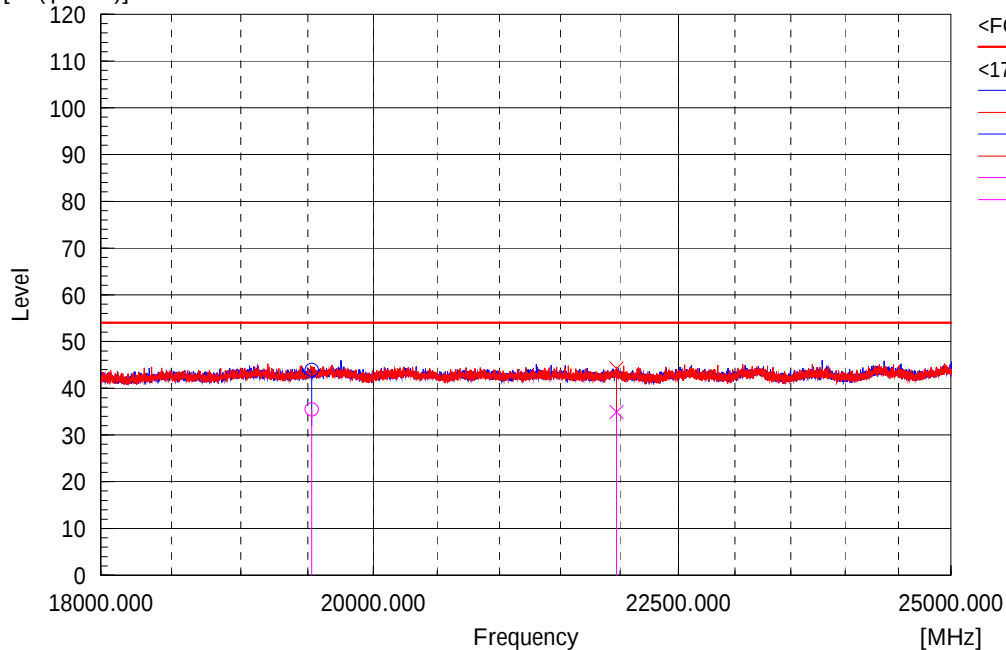
[BDR(DH5)/2441MHz]

Sony Global M&O Corp
Kisarazu DTS

<<Radiated Emission>>

Model : NYSNO-10
Serial : 5001062
Operator : M.KOUGA
Power : DC 3.6 V
Temp./Hum. : 20deg / 56%Limit : FCC Part15C 15.209(a) 3m
Remark1 :
Remark2 : Z
Remark3 : Mid
Remark4 : DH5

[dB(μV/m)]



Final Result

--- Horizontal Polarization (AV)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	19528.000	31.9	3.6	35.5	54.0	18.5	205.0	349.3

--- Vertical Polarization (AV)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	21969.000	32.0	2.9	34.9	54.0	19.1	154.8	27.4

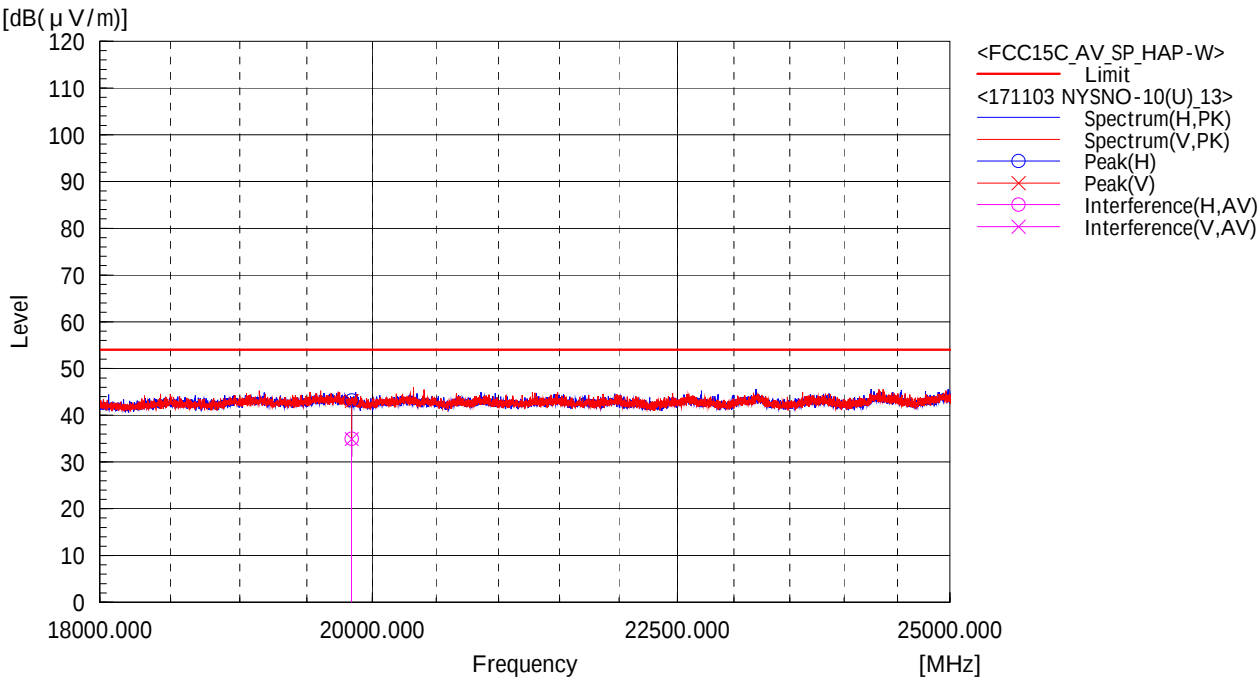
[BDR(DH5)/2480MHz]

Sony Global M&O Corp
Kisarazu DTS

<<Radiated Emission>>

Model : NYSNO-10
Serial : 5001062
Operator : M.KOUGA
Power : DC 3.6 V
Temp./Hum. : 20deg / 56%

Limit : FCC Part15C 15.209(a) 3m
Remark1 :
Remark2 : Z
Remark3 : High
Remark4 : DH5



Final Result

--- Horizontal Polarization (AV)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	19840.000	31.4	3.6	35.0	54.0	19.0	321.7	10.5

--- Vertical Polarization (AV)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	19840.000	31.3	3.6	34.9	54.0	19.1	276.1	59.7

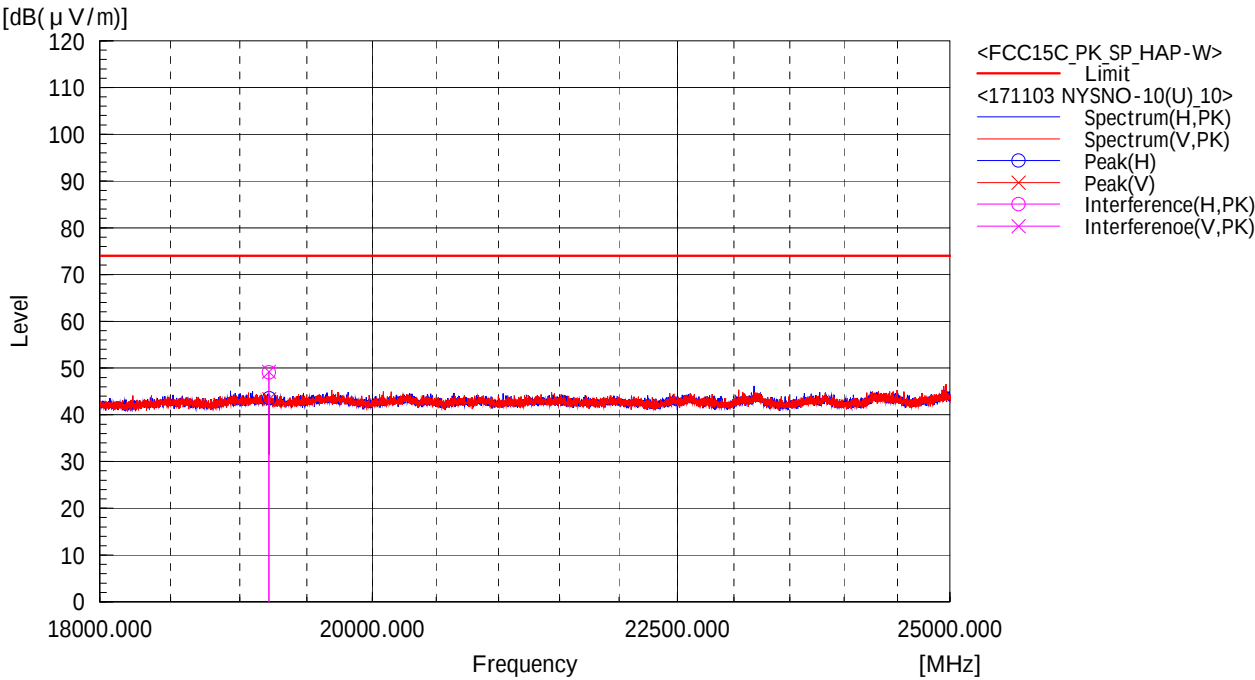
[BDR(DH5)/2402MHz]

Sony Global M&O Corp
Kisarazu DTS

<<Radiated Emission>>

Model : NYSNO-10
Serial : 5001062
Operator : M.KOUGA
Power : DC 3.6 V
Temp./Hum. : 20deg / 56%

Limit : FCC Part15C 15.209(a) 3m
Remark1 :
Remark2 : Z
Remark3 : Low
Remark4 : DH5



Final Result

--- Horizontal Polarization (PK)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	19216.000	45.6	3.5	49.1	74.0	24.9	336.0	58.6

--- Vertical Polarization (PK)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	19216.000	45.7	3.5	49.2	74.0	24.8	284.0	124.0

[BDR(DH5)/2441MHz]

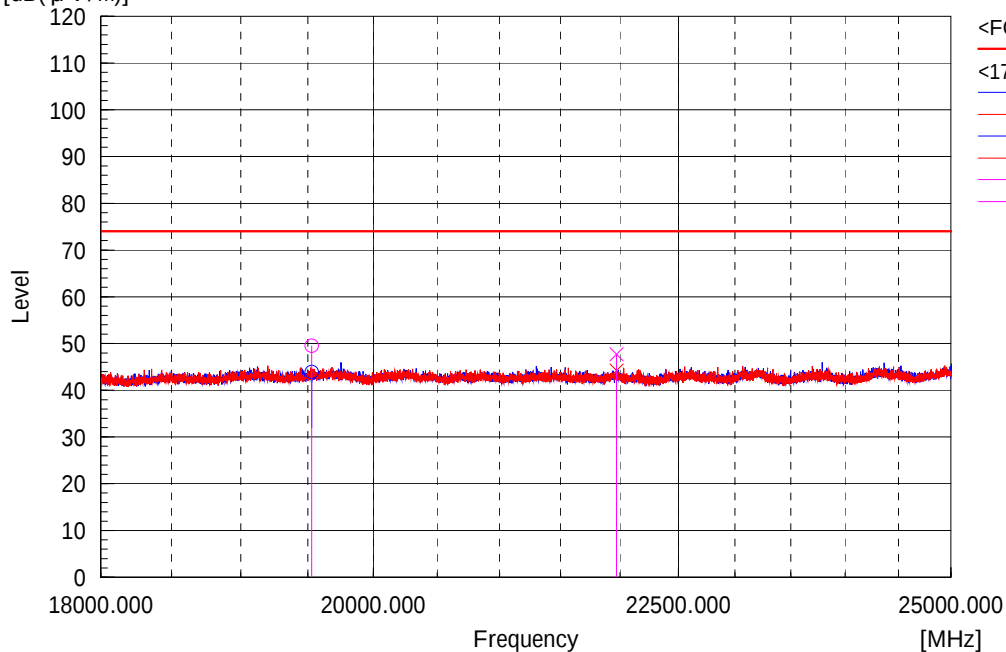
Sony Global M&O Corp
Kisarazu DTS

<<Radiated Emission>>

Model : NYSNO-10
 Serial : 5001062
 Operator : M.KOUGA
 Power : DC 3.6 V
 Temp./Hum. : 20deg / 56%

Limit : FCC Part15C 15.209(a) 3m
 Remark1 :
 Remark2 : Z
 Remark3 : Mid
 Remark4 : DH5

[dB(μV/m)]



<FCC15C_PK.SP.HAP-W>

Limit

<171103 NYSNO-10(U) 12>

Spectrum(H,PK)

Spectrum(V,PK)

Peak(H)

Peak(V)

Interference(H,PK)

Interference(V,PK)

Final Result

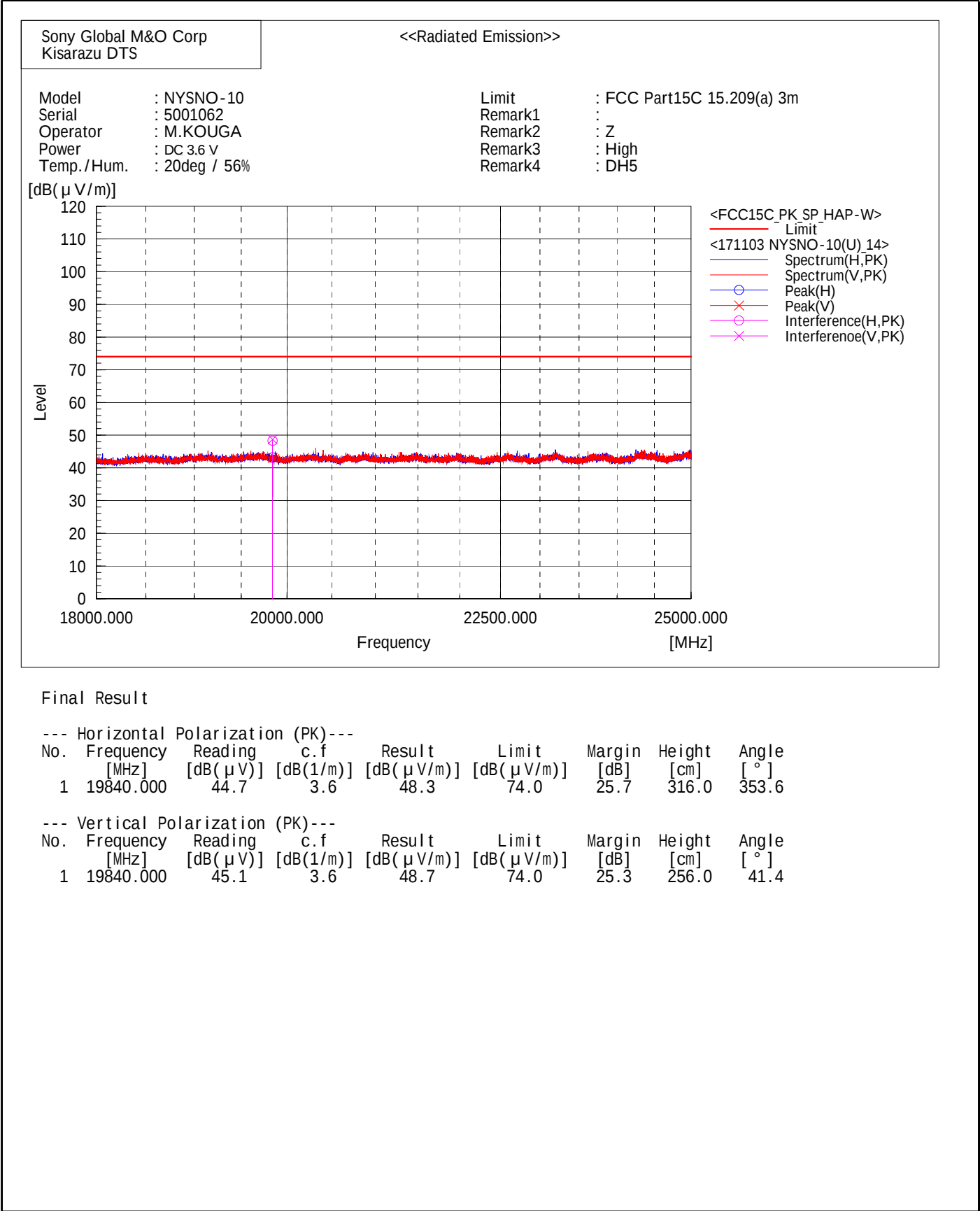
--- Horizontal Polarization (PK)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	19528.000	45.9	3.6	49.5	74.0	24.5	203.1	327.0

--- Vertical Polarization (PK)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	21969.000	44.8	2.9	47.7	74.0	26.3	156.1	40.0

[BDR(DH5)/2480MHz]



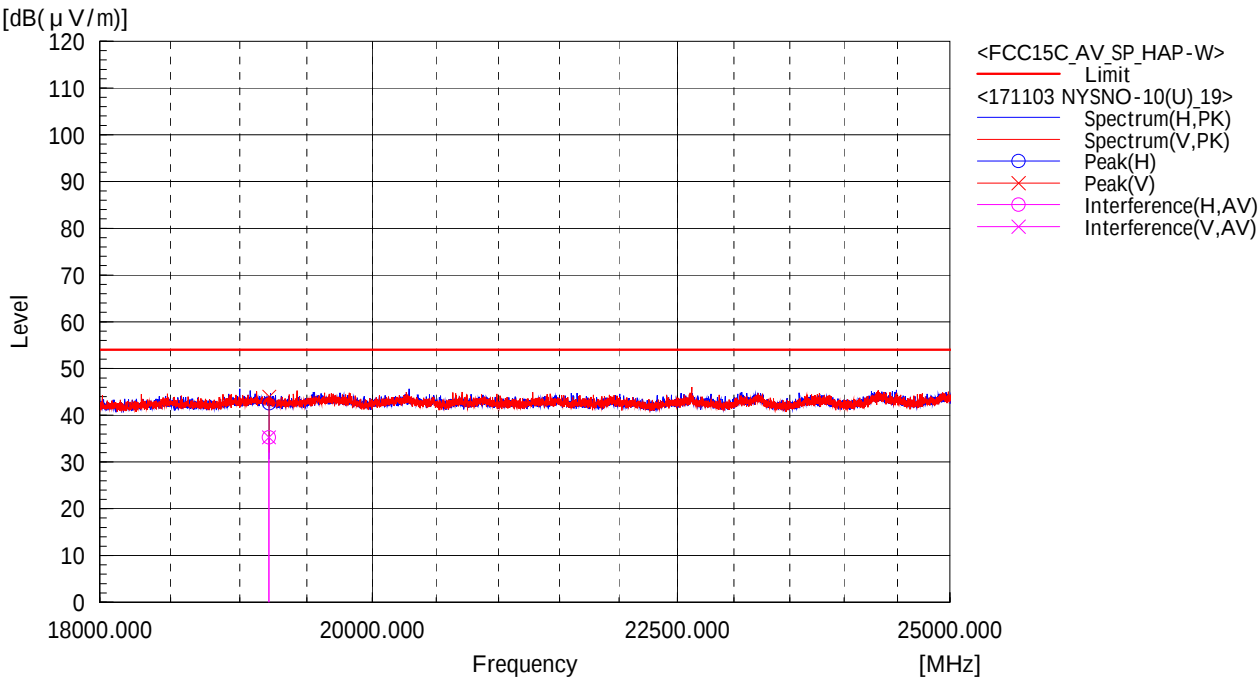
[EDR(3DH3)/2402MHz]

Sony Global M&O Corp
Kisarazu DTS

<<Radiated Emission>>

Model : NYSNO-10
Serial : 5001062
Operator : M.KOUGA
Power : DC 3.6 V
Temp./Hum. : 20deg / 56%

Limit : FCC Part15C 15.209(a) 3m
Remark1 :
Remark2 : Z
Remark3 : Low
Remark4 : 3DH3



Final Result

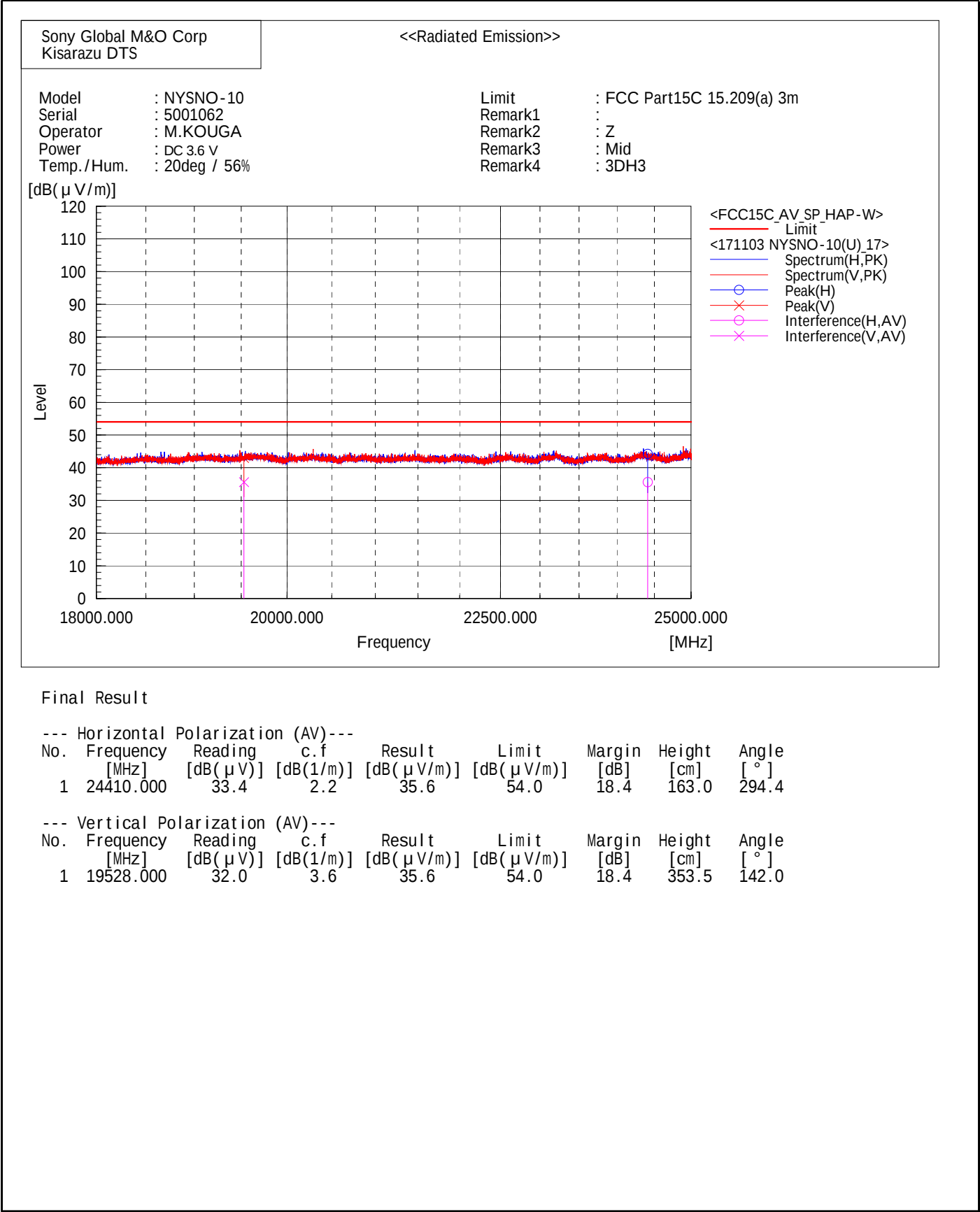
--- Horizontal Polarization (AV)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	19216.000	31.8	3.5	35.3	54.0	18.7	243.5	159.2

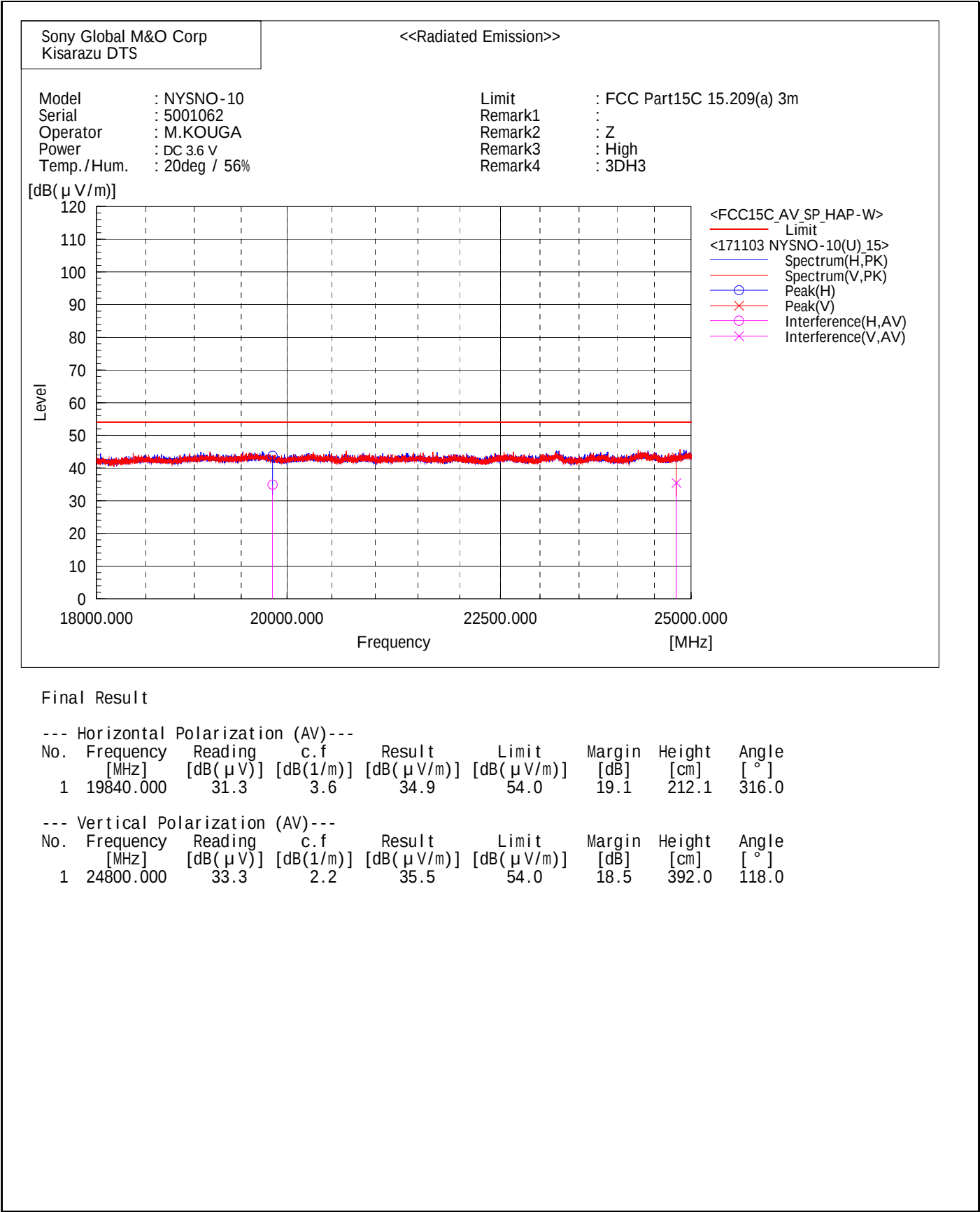
--- Vertical Polarization (AV)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	19216.000	31.8	3.5	35.3	54.0	18.7	156.9	129.6

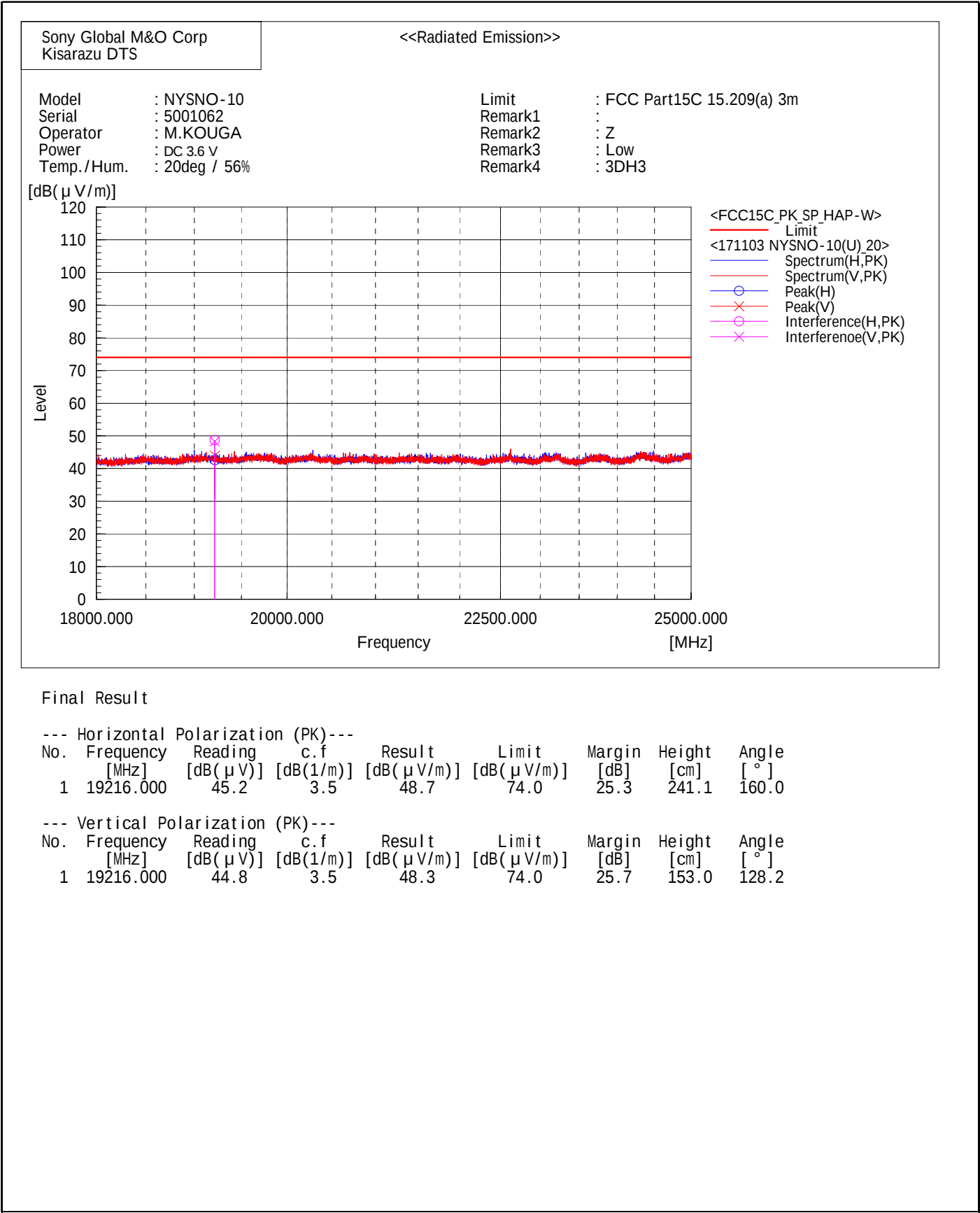
[EDR(3DH3)/2441MHz]



[EDR(3DH3)/2480MHz]



18-24.835GHz
[EDR(3DH3)/2402MHz]



[EDR(3DH3)/2441MHz]

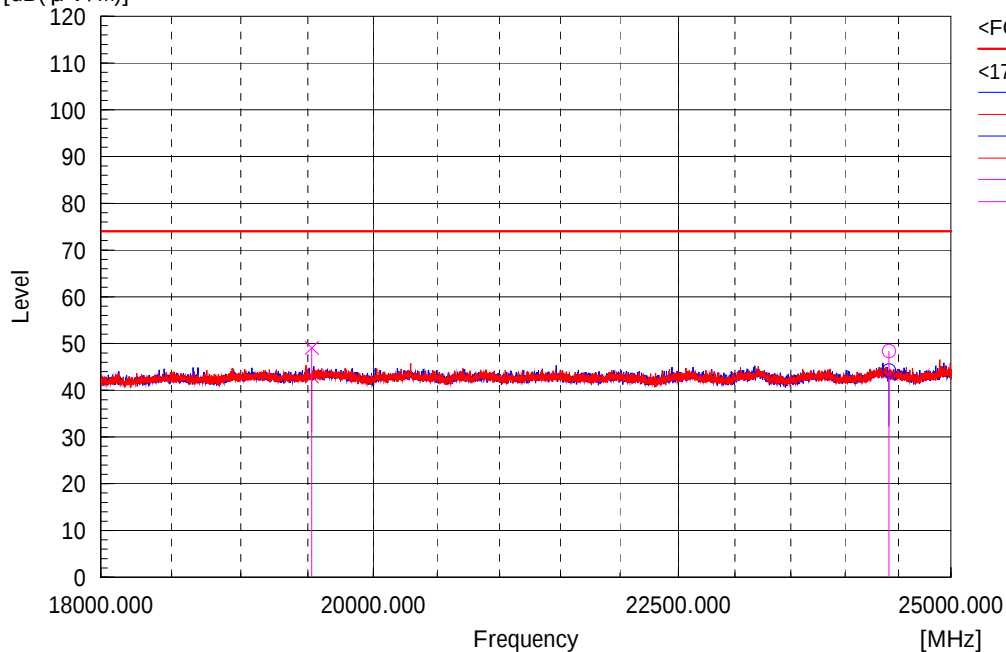
Sony Global M&O Corp
Kisarazu DTS

<<Radiated Emission>>

Model : NYSNO-10
 Serial : 5001062
 Operator : M.KOUGA
 Power : DC 3.6 V
 Temp./Hum. : 20deg / 56%

Limit : FCC Part15C 15.209(a) 3m
 Remark1 :
 Remark2 : Z
 Remark3 : Mid
 Remark4 : 3DH3

[dB(μV/m)]



<FCC15C_PK.SP.HAP-W>
 Limit
 <171103 NYSNO-10(U) 18>
 Spectrum(H,PK)
 Spectrum(V,PK)
 Peak(H)
 Peak(V)
 Interference(H,PK)
 Interference(V,PK)

Final Result

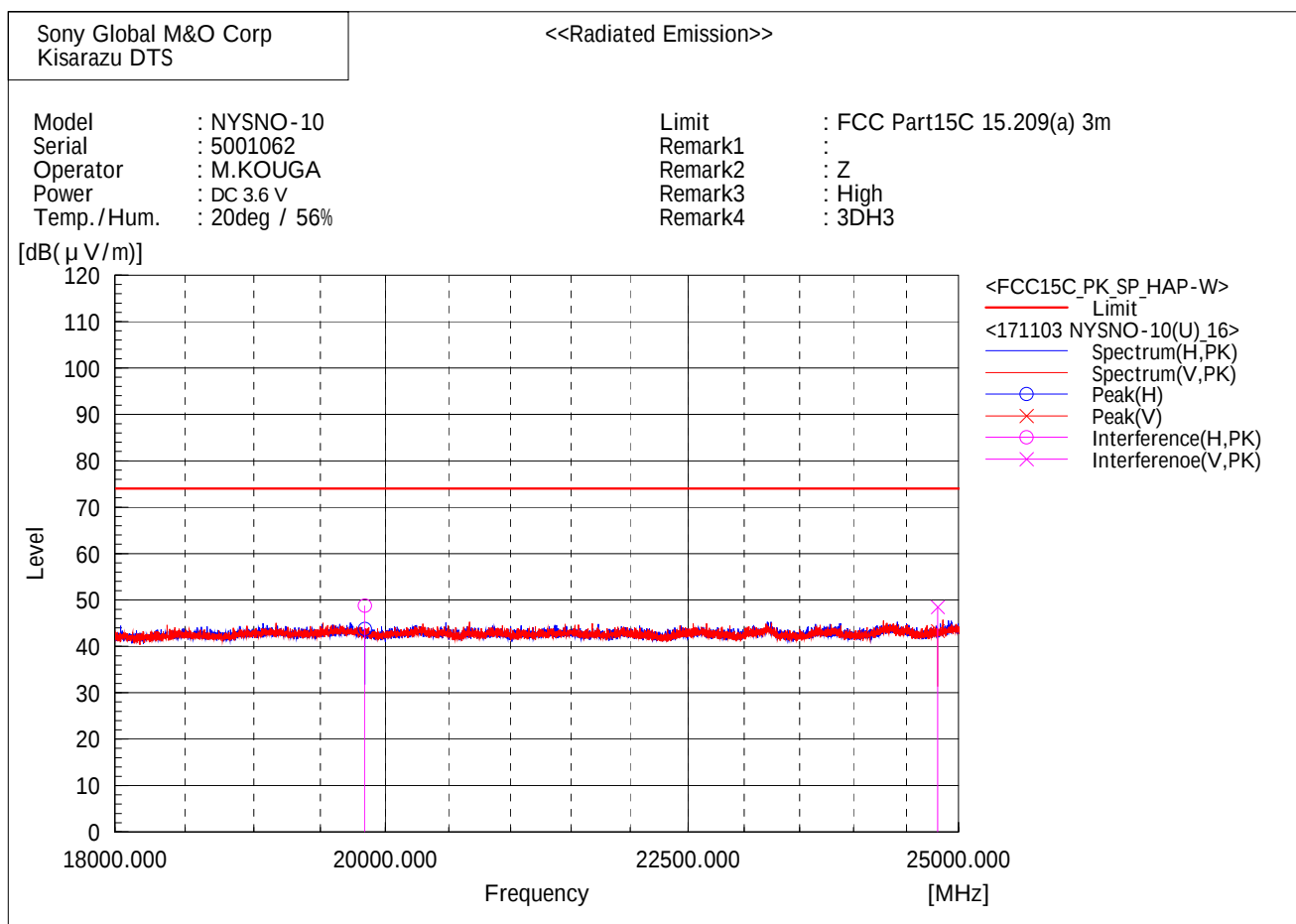
--- Horizontal Polarization (PK)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	24410.000	46.2	2.2	48.4	74.0	25.6	164.0	295.0

--- Vertical Polarization (PK)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	19528.000	45.5	3.6	49.1	74.0	24.9	350.6	142.0

[EDR(3DH3)/2480MHz]



Final Result

--- Horizontal Polarization (PK)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	19840.000	45.2	3.6	48.8	74.0	25.2	212.1	271.8

--- Vertical Polarization (PK)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	24800.000	46.3	2.2	48.5	74.0	25.5	386.6	120.0

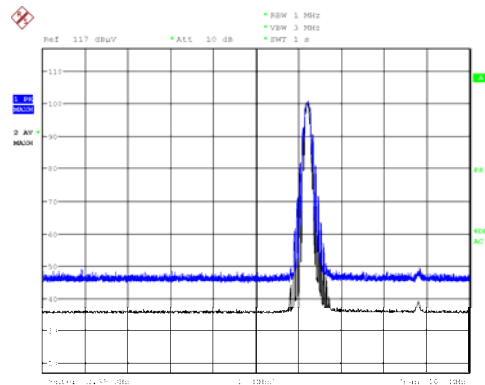
2.4GHz Restricted-Band Edge (Plot data)

These plot data show peak (trace blue) and average (trace black) spectrum for worst case emissions in the restricted-band edges. (Restricted band edges: below 2390MHz and above 2483.5MHz)

The result of the final radiated emissions measurement refers in previous pages.

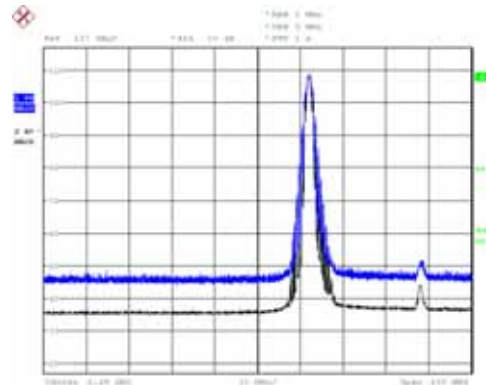
[BDR / 2402MHz]

Horizontal



Date: 8/27/2021 14:04:14

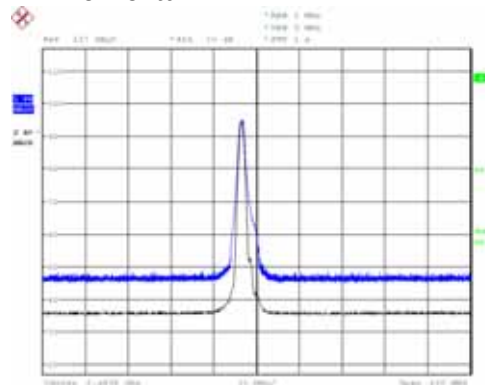
Vertical



Date: 8/27/2021 14:04:14

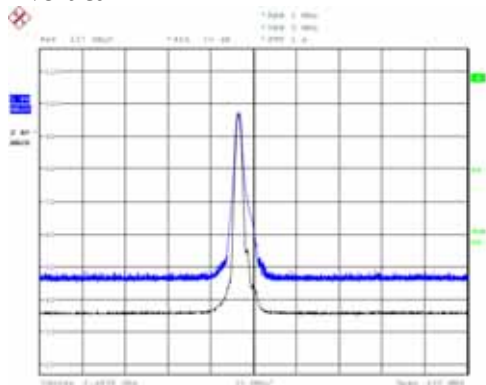
[BDR / 2480MHz]

Horizontal



Date: 8/27/2021 14:04:14

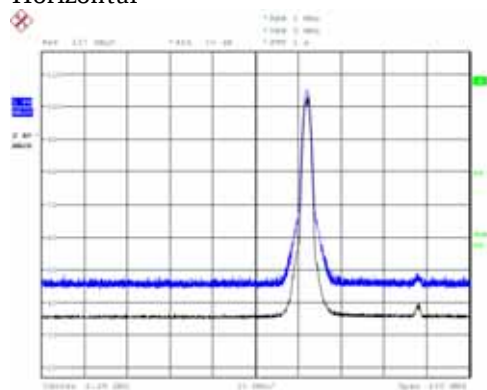
Vertical



Date: 8/27/2021 14:04:14

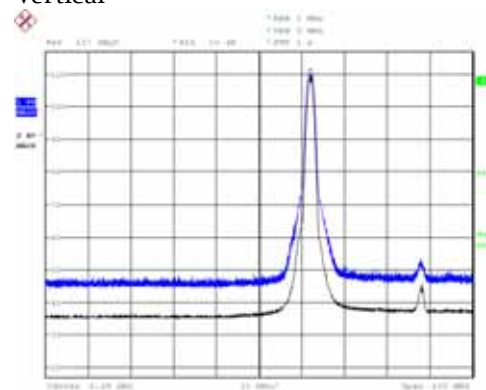
[EDR / 2402MHz]

Horizontal



Detec: 38-073-2777 630MHz

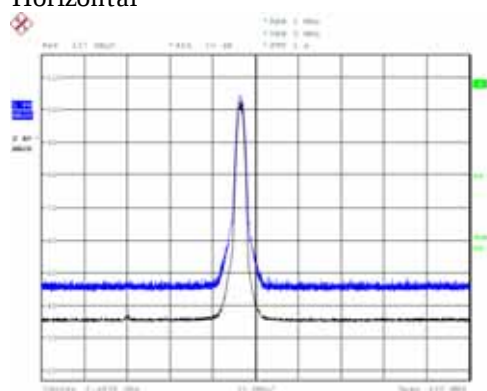
Vertical



Detec: 38-073-2777 630MHz

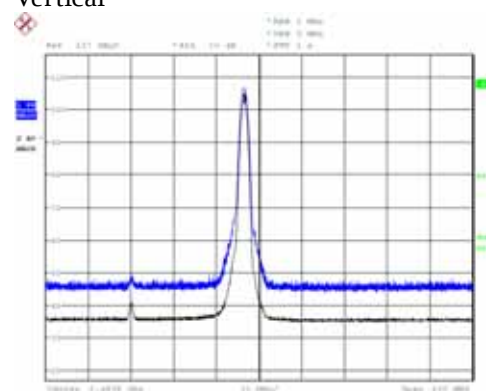
[EDR / 2480MHz]

Horizontal



Detec: 38-073-2777 630MHz

Vertical



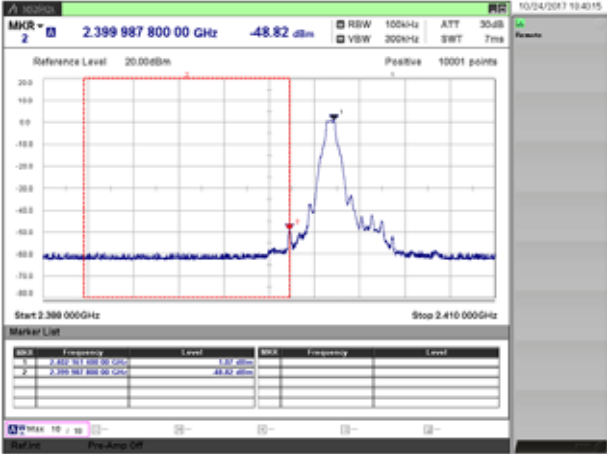
Detec: 38-073-2777 630MHz

3.7. Conducted Spurious Emissions for Band Edge

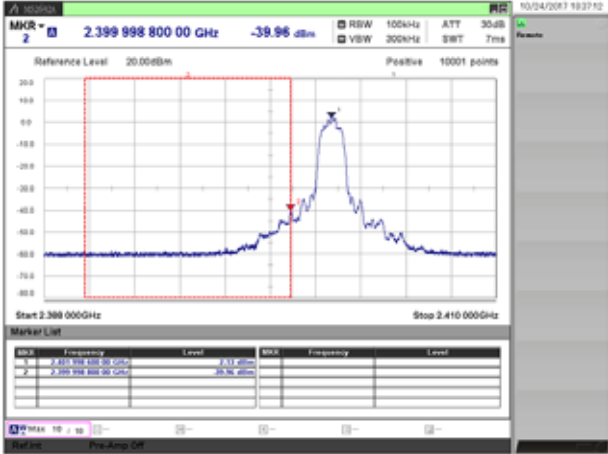
- 1) Ambient temperature : 22.2 deg.C
- 2) Relative humidity : 51.0 %
- 3) Date of measurement : October 24, 2017
- 4) Measured by : M. KOUGA
- 5) Operating mode : Transmitting mode

Mode		Channel [MHz]	Frequency [MHz]	Reading(PK) [dBm]	C.F. [dB]	Result(PK) [dBm]	Limit [dBm]	Margin [dB]
BDR	DH5	2402	2399.99	-48.82	12.02	-36.80	-6.9	29.89
			2402.16	1.07	12.02	13.09	-	-
EDR	3DH3	2402	2400.00	-39.96	12.02	-27.94	-5.8	22.10
			2402.00	2.13	12.02	14.15	-	-

[BDR]



[EDR]



4. Method of Calculation

4.1. Time of Occupancy (Dwell Time) Measurement

Method of calculation : Software
The Software for Calculation Name : SW-308
Version : Ver.3.1

$$\text{Test Result [msec]} = \text{Dwell Time [msec]} * \text{Cycle [time]} * 31.6 \text{ [sec]} / \text{Sweep Time [sec]}$$

Notes :

- (a) Dwell Time : Transmission duration of 1 hopping.
- (b) Cycle : Number of hopping appearances on the spectrum analyzer.
(The average of 5 measurements if it is random hopping equipment)
- (c) 31.6 : $0.4 \text{ [sec]} * \text{Number of Hopping Frequencies(79)}$
- (d) Sweep Time : Sweep time settings on the spectrum analyzer.

4.2. Maximum Peak Conducted Output Power Measurement

Method of calculation : Software
The Software for Calculation Name : SW-308
Version : Ver.3.1

$$\text{Test Result [dBm]} = \text{Meter Reading [dBm]} + \text{C.F. [dB]}$$
$$\text{Duty Cycle [\%]} = \text{Tx ON Time} / (\text{Tx ON Time} + \text{Tx OFF Time}) * 100$$

Notes :

- (a) Meter Reading : Reading of the spectrum analyzer.
- (b) C.F. : System Cable Loss + EUT Cable Loss

4.3. Radiated Spurious Emission Measurement

Method of calculation : Software
The Software for Calculation Name : V-Scan
Version : Ver.4.0.30

Test Result [dBuV/m] = Meter Reading [dBuV] + C.F. [dB/m]

Notes :

- (a) Meter Reading : Reading of the EMI test receiver or spectrum analyzer.
(b) C.F. : ☒ Antenna Factor (including Balun Loss) + System GainLoss
: ☐ Antenna Factor (including Balun Loss) + System GainLoss + 20 log (3 m/ 10 m)

4.4. Conducted Spurious Emission for Band Edge Measurement

Method of calculation : Software
The Software for Calculation Name : SW-308
Version : Ver.3.1

Test Result [dBm] = Meter Reading [dBm] + C.F. [dB]

Notes :

- (a) Meter Reading : Reading of the spectrum analyzer.
(b) C.F. : System Cable Loss + EUT Cable Loss

5. List of Test Equipment

All test results are traceable to the national and/or international standards.

5.1. Antenna-port Conducted Measurements

4th Site Shielded Room

	Ctrl.#	Equipment	Model No.	Serial No.	Manufacturer	Cal.Int.	Last Cal.
x	-	Shield Room	B83117-B2432-T161	P26428	Albatross Project	-	-
x	W100	Spectrum Analyzer	MS2692A	6201338954	Anritsu	12	17.04.14
x	W006	Power Meter	N1911A	MY50000295	Keysight Technologies	12	17.10.10
x	W007	Power Sensor	N1922A	MY50180022	Keysight Technologies	12	17.10.10
x	W029	10dB Attenuator	8493C	76549	Keysight Technologies	12	17.08.03
x	WC05	RF Cable	SUCOFLEX 102	34287	HUBER + SUHNER	12	17.08.03
x	M719	Thermometer	TH-321	140053	AS ONE	12	17.04.28

5.2. Radiated Spurious Emissions

4th Site 10m Semi-Anechoic Chamber:

	Ctrl.#	Equipment	Model No.	Serial No.	Manufacturer	Cal.Int.	Last Cal.
x	M506	EMC Chamber	10m	-	TDK Corp.	12	17.07.10
x	M575	EMI Receiver	ESCI	100161	Rohde & Schwarz	12	17.04.19
x	M486	EMI Receiver	ESU40	100050	Rohde & Schwarz	12	17.05.15
x	A043	Biconical Antenna	BBA9106	VHA91032598 (V5)	Schwarzbeck	12	17.04.30
x	A046	Log-periodic Antenna	UHALP9108A1	0830	Schwarzbeck	12	17.04.30
x	A056	Horn Antenna (1-6 GHz)	BBHA9120D	670	Schwarzbeck	12	17.04.30
x	A057	Horn Antenna (6-18 GHz)	HAP06-18W	00000037	TOYO Corp.	12	17.04.30
x	A058	Horn Antenna (18-26.5 GHz)	HAP18-26W	00000016	TOYO Corp.	12	17.02.13
x	RA004	Loop Antenna	HFH2-Z2	882964/029	Rohde & Schwarz	12	17.10.11
x	CS039	Fourth Site RE Cable System 3	-	-	Internal Manufacturing	12	17.01.16
x	CS064	Fourth Site RE Cable System 8	-	-	Internal Manufacturing	12	17.01.16
x	CS065	Fourth Site RE Cable System 8	-	-	Internal Manufacturing	12	17.01.16
x	CS066	Fourth Site RE Cable System 9	-	-	Internal Manufacturing	12	17.01.16
x	M510	RF Selector	NS4900	0802-226	Toyo Corporation	12	17.01.16
x	M706	3dB Attenuator	8491A	MY39267782	Keysight Technologies	12	17.01.16
x	M620	RF Pre-Amp	8447D	2944A10720	Keysight Technologies	12	17.01.16
x	M831	GHz Filter Box	FB-G1	2	Sony Global M&O	12	17.01.16
x	M689	Thermo Meter	AD-5640A	201303	A&D	12	16.11.07
x	M749	Thermo Meter	CTH-201	004	CUSTON	12	17.10.17

About calibration interval

Valid until the end of the month listed in "Cal. Int." column.